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Croonian Lectures

ON

THE NUMERICAL METHOD, AND ITS APPLICATION TO THE SCIENCE AND ART OF MEDICINE.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS, 1860.

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PART III.

The Numerical Method, its Principles and Rules. Our Individual Facts should be Counterparts of each other. Instances of Neglect of this Rule. Different Occupations described by the same Name. The same persons differently designated through Errors of Judgment, with which the Numerical Method is not chargeable. Examples of Errors of "Non-observation". Bryan Robinson's Experiments on the Pulse. Units should be grouped in Hundreds, or Portions of a Hundred. Average and Extreme Values as Data for Reasoning. Examples of the Use of Extreme Values. The Lung-Tests. Orfila's Calculation of the Stature of the Body from the Length of the Long Bones. Fallacy of Applying Average Results to Individual Instances. Source of the Fallacy. True Uses of Average Results. The Principle of Assurance of Life, Health, and Property. The True Claims of the Numerical Method.

THE first and most obvious principle of the *numerical method* is, that the individual facts which we bring together, and from which we obtain our averages, should be, in everything but the inseparable incident of variable numerical values, counterparts of each other. If, for instance, we wish to ascertain the average age at death of a given class of men, we should take care to comprise in our tables only men belonging to that class. And we should not be content with excluding from our tables all persons belonging to any other class: we ought to go further, and make ourselves sure that, under one common name, several classes of persons, differing from each other in very important particulars, are not confounded. Take, for example, that useful body of men, the letter-press printers. We should commit a very great error if we brought together in one group, from the Reports of the Registrar-General, the deaths, and ages at death, of all persons designated as printers, believing printers and letter-press printers to mean one and the same class of men, and forgetting that there are copper-plate printers, and lithographic printers, and calico-printers, and silk-printers. But, even supposing that we admitted into our collection of ages at death none but letter-press printers, we might still fall into very serious error, if we overlooked the fact that in printing offices there are several classes of men, such as compositors, pressmen, readers, engine-men, and warehousemen, any one of whom would certainly be returned to the Registrar-General simply as a printer.

Similar precautions, I need scarcely remind you, will have to be observed in making use of the Registrar-General's returns of the *causes of death*, especially in respect of all those diseases which are either difficult of description or difficult of diagnosis. Of these returns, I need not observe, there is scarcely a single item which can be relied upon as a simple isolated statement of the number of deaths from a given cause. But it ought not to be forgotten that, in comparing one year with another year, separated from it only by a short interval, we may obtain very valuable information. The returns of years separated by longer intervals of time are subject to serious modifications from the improvements which are being constantly effected in medical education, and in medical nomenclature and diagnosis.

This subject of the reports of the causes of death in the tables of the Registrar-General is a very fruitful one, and might of itself be made the means of illustrating one whole class of fallacies clinging to the use of numbers; but the limited time at my command prevents me from entering into it more at length. We must take care, therefore, not to mistake names for things. We must, at the very outset of any inquiry embracing a considerable body of facts, make ourselves acquainted with the nature of the individual facts or units from which our average results are to be deduced. If we do not observe this precaution, we must fall into very serious errors.

There is a source of error very similar to the one to which I have just adverted; it consists in losing sight of certain constituent members of a class of persons, in consequence of their having changed their names. The early history of the sanitary movement affords an instructive example of this kind. One of our leading sanitary reformers caused to be abstracted from the Returns of the Registrar-General the ages at death of all adult males dying in the metropolis in one year; and he arranged the results in three classes—namely, gentry (including professional men); tradesmen; and operatives (or labouring men); and he obtained results which, if real, would have shown a frightful excess of mortality among the working class. But the results were unreal. They did not display the true state of the case. The labouring class was made to appear very short lived, because the persons dying in workhouses, who belong chiefly to that class, were placed apart in a class by themselves; and we all know that great numbers of men, who have been working men, die in our workhouses at very advanced ages. Had these old men been comprised in the tables, instead of being excluded from them, we should have had, as I ascertained by making the necessary correction, a very different result. The working class, though still somewhat shorter lived than the class of gentry, were found to differ very little from the class of tradesmen.

Ignorant and prejudiced persons are apt to point to such mistakes as these as proof of the fallaciousness of the numerical method, or, as they prefer to call it, *statistics;* and they are fond of saying that anything may be proved by statistics. But they are greatly in error. The numerical method is in no respect in fault. The error committed in this case was an error of judgment—an error (to use an expressive phrase of John Stuart Mill's) of non-observation, which the observer fell into before he began to collect his figures, and which he would probably have committed in any investigation whatever, even though not a single figure was used in it. Bryan Robinson, one of our earliest cultivators of a numerical method, made a very similar mistake, and fell into a like error of non-observation, when overlooking, or being ignorant of, the remarkable influence of age on the pulse, he compared the pulses of persons of different statures, beginning with young children, and ending with full-grown adults; and so succeeded in expressing the relation of the pulse and the stature by an empirical mathematical formula. He found "that the mean pulses of regular proportioned bodies are to one another as the biquadrate roots of the cubes of the lengths of the bodies."

Now, it is obvious that Bryan Robinson's error did not consist in careless counting of pulses, in an imperfect record of his figures, or in erroneous calculation. He committed a very common mistake in planning his observations. He did not contrive, as all sound experimenters, whether their results are to be expressed in words or in figures, do,—he did not contrive to make all other circumstances equal except the one of which the variation was the phenomenon he desired to discover and measure.

These two illustrations of a class of errors very commonly attributed to what are termed *statistics* will serve not only to indicate the nature of a special fallacy, but to render it probable that other fallacies also are really traceable not to the

method itself, but to offences against the recognised canons of inductive logic, which all experimenters and observers are as prone to commit as the statist himself.

Those who accuse the statist of unusual liability to error, or still worse, of dealing with materials by the clever manipulation of which anything may be proved, would perhaps be equally disposed to depreciate his discoveries though made, as they are and must be, by the skilful application of the same logical methods that lead men to discovery in other branches of science. But scientific men, who make use of numbers as their data for reasoning, are justified in claiming for their discoveries the same credit which attaches to those who arrive at the same original results by the use of the same logical methods.

Assuming that in any inquiry which we are about to institute with the aid of numbers, we take the necessary precautions to insure the exact similarity of our individual facts, so that they may be counterparts of each other, in every respect, if they are simple units, or differ only in numerical value, if units of variable magnitude; and that we observe all the obvious logical canons applicable to experimental inquiries in general, the rules for arranging our facts with a view to the summing up of their results are simple and obvious. Whether we are dealing with simple units or units of variable magnitude, we should always endeavour to make our facts, if small in number, some simple fraction of 100; such as one-fourth, one-half, or one-fifth, so that we may easily express the results in centesimal proportions.

Having taken care that our individual facts are comparable facts, and having formed them into groups of convenient size, it remains that we take those simple precautions in adding the units together, in dividing the sum total so as to obtain average or mean results, and in calculating fractional or centesimal proportions, which the rules of arithmetic prescribe.

These average results are for us what the more simple results of observation or experiment are to others. It is by comparing one average with another obtained under different circumstances that we discover new truths. But it is sometimes forgotten that, in using masses of figures, we possess ourselves not merely of average results, but also of extreme values, and that these extreme values are to questions of *possibility* what averages are to questions of *probability*. As the skilful use of these extreme values often leads to very important practical results, I will illustrate it by examples.

In courts of law, as you are well aware, witnesses are much more frequently interrogated respecting the possible than the probable. They are required to state whether a certain event, or certain condition of things, is possible, not whether it is merely probable; and it is obvious that, when the matters under consideration assume a numerical form, the answer is tantamount to a statement of extreme values.

I will take an illustration of the use of extreme values from the subject of infanticide. Two of the tests proposed for determining the question whether an infant had or had not breathed are numerical tests. The one consists in comparing the weight of the lungs, in a case under investigation, with the ascertained weights of the lungs of infants who have and who have not breathed. The other consists in comparing the ratio which the weight of the lungs bears to the weight of the body with similarly ascertained ratios. Of these two static lung tests, I will take the first—the absolute weight of the lungs,—only observing, in passing, of the other, or Ploucquet's test, that it was actually proposed as a test on the strength of three experiments, and those not strictly comparable ones. At first, the standard weight of the lungs of a mature infant who had not breathed was assumed to be *one ounce*, and that of an infant who had breathed *two ounces*. But actual experiments on the weight of the lungs before and after respiration soon showed that these assumed standard weights were much too wide asunder, and by no means corresponded with the averages obtained. Even after this correction, however, the average weight of the lungs continued to be used; and to be spoken of in medico-legal treatises with considerable respect, as one of the tests of respiration. In making use of it for this purpose, the important consideration was overlooked that, in a trial for infanticide, the question is not whether it is more probable that the child breathed after its birth than that it was still-born, but whether it was *possible* that the child supposed to have breathed after its birth might not, after all, have breathed at all. Now, it is quite clear that the question which is apt to be raised in a court of law is also the question which we ought to aim at solving in the closet. Instead, therefore, of comparing the average weights before and after respiration with each other, we ought to contrast the extreme weights. This is done in a table which will be found at page 127 of my work on the *Principles of Forensic Medicine*, from which it appears that in thirty-four weighings of the lungs, the minimum weights before and after respiration exactly corresponded; while two of the weights of lungs in still-born children greatly exceeded the highest weights in children born alive—a fact in direct contradiction of the prevailing and accepted hypothesis, which makes the weight of the lungs after respiration greater than the weight in still-born infants. This table affords a good and sufficient illustration of the use that may be made of extreme values, and of the errors which may be committed by those who employ average values for purposes to which they are inapplicable.

The science of forensic medicine affords, at least, one other good example of the undue and improper value sometimes attached to average results. No less an authority than Orfila fell into this error, in attempting to calculate the stature of the body from the length of some long bone, such as the humerus or femur. He made several measurements of all the long bones of the extremities, and of the statures of the persons to whom they belonged; and then, without even accurately casting up the sums of the several measurements, and dividing by their number, so as to arrive at average results, rashly expressed the opinion that the use of his measurements would enable a man to estimate very closely the real stature of a skeleton by means of the ascertained length of one or other of these bones. In order to satisfy myself whether this opinion of Orfila's was well or ill-founded, I resorted to his original measurements, and, bringing together all those measurements of any one bone (say the femur) which exactly corresponded, I placed opposite to them, in another column of the table, the highest and lowest stature to which he found them to correspond. The results are shown in another table, for which I must refer you to page 26 of the same publication. That table shows clearly that, in making use of Orfila's facts, it would be possible to exaggerate or undervalue the stature by no less than 8¼ inches.

I may, perhaps, be allowed to refer to this table as an illustration of the value of that universal logical method which consists in making equal every element of a scientific comparison except the one of which we wish to determine the variation. Bones of equal length are compared with statures which prove to be variable, and to vary within very wide limits.

This example from Orfila may also be used as an apt illustration of a very common mistake into which otherwise able men are apt to fall, of making practical application of the average results of a number of instances to a single instance of the same kind. Let me say a few words with a view of tracing this fallacy to its source, and guarding against the danger of our falling into it ourselves.

In all the cases in which we deduce average, or mean, numerical results from a collection of individual facts, we adopt precisely the same mode of procedure. It matters not whether we are dealing, as the astronomer sometimes does, with observations which owe their variation in numerical value to the variation in the quality of the observations themselves; or, as the engineer sometimes does, with experiments which owe their variable numerical value to differences in the quality of the material upon which he is making his experiments; or, as the physician is constantly doing, with results which owe their variation in numerical value to the variable proportion in which the numerous concurrent causes of the individual results are combined. All these cases, however they may differ in other respects, agree in this, that columns of numerical facts, of which probably no two are exactly alike, are added together, and the sum divided by the number of facts. So, also, with the average age of a living population, or the average age at death, or the average frequency of the pulse or respiration. The respective ages of the living, or of the dead, and the respective numbers of the pulse or breathing, are written down, added together, and the sum of the numbers divided by the number of the facts. And so again with the simplest order of facts, which do not differ in numerical value,—mere units, such as births and deaths—we sum them up, and compare them with the number of the population out of which those births and deaths happened; and, as the population is much more numerous than the births or deaths occurring in it in such short spaces of time as a year, the result is represented by a small fraction. The deaths, one year with another, in England and Wales, for instance, amount to one in every forty-five of the living population. Now, it is very important that we should form a clear conception of the way in which these average

results are obtained. They are deduced from the whole of the figures employed, and not from a part of them only. It is not out of every forty-five persons living in England and Wales in one year that one death happens. We could not undertake to say that, out of forty-five persons occupying some large country mansion, or some school, or some small group of houses, throughout a year, one would die. We should prove very bad prophets if we did. Our assertion that one in forty-five of the living population dies annually applies to the whole population of England and Wales, of both sexes, and all ages, but not to every group of five and forty persons, and especially not to every group of forty-five infants or forty-five aged men or women. It must be obvious to the meanest capacity that this large truth, expressed in numbers, has no practical application whatever to any individual man, woman, or child; and that it could not even be safely applied to any single group of forty-five persons, though closely resembling, in the sexes and ages of the persons of whom it consists, the population of England and Wales of which it forms a part.

The same observation applies to facts of variable numerical value. If I count the pulses of fifty persons, add the numbers together, and obtain an average result, my average is that of the whole fifty facts, and not of any smaller number of facts. I could neither undertake to state the average of five pulses, or of ten pulses, nor the number of the pulse of any person whom I had not seen before. All that it would be at all reasonable to expect is, that the pulse of this person would have the same frequency as that of some one person, or possibly two persons, out of the fifty from which I obtained my average. But, even in this not unreasonable expectation, I might be deceived; for this pulse might chance to be of that rare exceptional order which does not occur once in fifty, or even in one hundred or one thousand times—a pulse of forty, for instance.

The true nature of the case is, perhaps, better seen when we deal with instances in which the fractional result obtained is larger than in the case of the mortality of England and Wales to which I have just referred. Take, as a good and instructive example, the mortality in hospitals, or the deaths from pulmonary consumption occurring among the adult male population of England and Wales. Say that the mortality of a general hospital is *one in ten* of its inmates; and the deaths from pulmonary consumption *one in five* of the adult male population. Every man with a grain of sense in his composition will see that it is not one out of every ten patients in the hospital, or one out of every five of the male population, that perishes, but simply at the rate of one in ten, and one in five. The proportions—one in ten, and one in five—were the results of a large calculation, founded upon a large number of instances, and do not admit of application to small groups of persons.

These considerations are so obvious that you may, perhaps, think I ought not to have detained you with them. But the fact is that those persons who object to the use of the numerical method, or habitually underrate its value, really so far misunderstand those who practise the method as to accuse them of the very misconceptions which I am now endeavouring to remove. These remarks, therefore, are not uncalled for; nor is it unnecessary that I should tell you at once what kind and degree of importance the men who know most of the numerical method, theoretically and practically, really attach to it.

In the first place, they affirm that the numerical method admits of most useful application whenever we can reapply the results obtained from a considerable body of facts to a similar collection of facts of the same order. Such is the insurance of life and of health, and the insurance of property against fire or shipwreck. A large body of facts has been collected showing the mortality and liability to sickness at different ages, and the relative number of vessels destroyed or injured by shipwreck, and of houses injured or consumed by fire. We construct tables presenting the average results of these facts; we add a certain fraction for office expenses, and a certain fraction for possible inaccuracies in our calculations, and proceed to risk millions of money in insuring individual lives, ships, and houses; and our procedure is justified by experience. Though one man shall be knocked down by a carriage, and killed on the spot, as he leaves the insurance office, fresh from the payment of his first premium; though a vessel founder at sea, or a house be burnt to the ground, within a week of the act of insurance, the underwriters are not troubled. Such cases were comprised in the columns of the tables on which their calculations of risk were based; and it is reasonable to expect that these, as well as every possible variety of more favourable occurrence, should sooner or later take place.

In the second place, the advocates of the numerical method affirm that, subject to certain simple provisos (as that the individual facts shall be strictly comparable facts; that they shall be carefully and skilfully handled; that the calculations of average results shall be correctly made; and that the facts themselves shall be numerous), the averages obtained (and the same remark applies to the extreme values) are as useful, for all purposes of comparison and reasoning, as any other ascertained truths, whatever the shape which they may assume.

In the third place, the advocates of the numerical method do not claim for it any great amount of utility when directly applied in the service of the arts. They allege only on its behalf, that average values express tersely and concisely many of the facts with which the practitioner ought to be acquainted; but they admit that they cannot be safely applied to individual instances. It is otherwise with extreme values, which do admit of important practical applications. The engineer, for instance, having ascertained the maximum strength of some material which he is about to use in some important public structure, as a bridge or a ship, satisfies himself and the public by largely exceeding that maximum in his calculations, and providing the strength of his materials accordingly.

These, then, are the limits of the claims set up on behalf of the numerical method; and these are the limits within which its applications to the science and art of medicine are restricted. I shall consider further the rules and principles of the numerical method in my next.

Lectures
ON
THE HISTORY OF MEDICINE.

DELIVERED AT
THE GROSVENOR PLACE SCHOOL OF MEDICINE.
BY
ALEXANDER HENRY, M.D.

LECTURE III.

Circumstances favouring the Development of Philosophy among the Greeks. Character of early Grecian Philosophy. Pythagoras. Alcmæon. Empedocles. Anaxagoras. Democritus. Heraclitus. Public Practice of Medicine: its Origin. Dispersion of the Crotona School. Democedes. Acron. Public Gymnasia: their influence on Medicine. Herodicus. Iccus. Summary.

[*Concluded from page* 390.]

HAVING given a fragmentary notice of the opinions of the philosophers who preceded Hippocrates or were contemporary with him, I will direct your attention to some facts in the history of the commencement of the practice of medicine in public.

The philosophic schools, especially that of Italy, at an early period produced men who began to deprive the Æsculapian priests of their monopoly of medical practice. For the purpose, however, of gaining and retaining the confidence of the people, they at first employed, like the priests, incantations, expiatory sacrifices, and other superstitious practices. Gradually, however, they threw off the mask of mystery, and openly avowed that disease was treated by natural means.

An event which contributed in no small degree to the emancipation of medicine from priestcraft and superstition, was the dispersion of the Pythagorean Society of Crotona. This, which was the result of a popular outbreak, broke the firm bonds which had hitherto held the members together, and diminished the religious feeling with which they had hitherto held inviolable the secrets of their order. Travelling into foreign states, they associated with the uninitiated, and revealed to them, with little or no scruple, their mysterious knowledge; and thus this, no longer a secret, became the common property of the public. Of these practitioners who thus emanated from the school of Crotona, several had the title of *Periodeutæ*, or travellers; because they travelled from country to country, practising their art. By this proceeding they gained the enmity of the Æsculapian priests, who still desired to conceal their secrets under the veil of mystery; but, in the end, there is no doubt that they were mainly instrumental in bringing about, by the force of public opinion, a salutary revolution in the manner in which medicine was practised.

Among the most celebrated of the Pythogoreans who were obliged to fly from Italy, was Democedes of Crotona. A price being set on his head by the inhabitants of Crotona, he fled to Platea, and afterwards practised medicine at the court of Polycrates, tyrant of Samos. According to Herodotus, his reputation was so great that he was sent for to the court of Sardis, where he cured Darius Hystaspes of a sprained foot which had been unsuccessfully treated by the Ægyptian priests, and healed the queen Atossa of what appears, from the description, to have been an obstinate ulcer of the breast. This account of Democedes is worthy of mark, as shewing the power which the open exercise of medicine was beginning to gain over the public mind.

Acron of Agrigentum, a contemporary of Empedocles, is reputed by some to have been the founder of the empiric sect. His tenets, indeed, much resembled those of this sect; but as it did not formally rise into existence until a much later period, it is best to consider him as a man *sui generis;* or rather, as one whose practice was simply Æsculapian, *minus* the mystery, and opposed to the speculative practice of the philosophers. He and Empedocles seem to have had a truly professional contempt for each other—as great as any theoretical and practical men of the present day feel. Empedocles, like most of the Pythagoreans, held himself in a measure divine. Acron, it is said, wished to have a monument erected to himself during this life, with an appropriate inscription. On his consulting his friends as to the best inscription, Empedocles recommended, in satire, the following:

Ἄκρον ἰητρὸν Ἄκρων' Ἀκραγάντανον πατρὸς ἄκρου
Κρύπτει κρήμνος ἄκρος πατρίδος ἀκροτάτης.

Here is the translation:—"A craggy rock of his most eminent country hides Acron of Agrigentum, the most excellent physician, son of an eminent father."

As to his actual practice, we have not much related, except that, on the occasion of a great plague in Athens, he had large fires lighted in the streets with the object of purifying the air. He is said to have written, in the Doric dialect, some works on the art of healing and on dietetics.

Besides the adoption of medicine by the philosophers as a portion of their study, and the public practice of it by the disciples of the dispersed school of Crotona, the organisation of the public gymnasia had an influence on the practice of the art. These institutions were the places chosen by the philosophers for study and instruction; and they were often placed in the vicinity of the Æsculapian temples, so that the priests gradually were led to teach their art to those who were not initiated into their order. The directors and *employés* of the gymnasia, indeed, gradually became the popular practitioners; in a manner, probably, not unlike that in which chemists and druggists would take on themselves the office of practitioners of medicine. The directors (*γυμνασιαρχοι*) regulated the hygiene of the youth who frequented the gymnasia: the subdirectors (*γυμνασται*) treated diseases: and the attendants (*ἀλειπται* or *ἰατρολειπται*) bled, administered enemata, and dressed wounds, ulcers, and fractures.

Among the gymnasiarchs, who exercised the greatest influence on the practice of medicine, were Herodicus of Selymbria and Iccus of Tarentum.

Herodicus is said to have been a sophist, who, being in ill health—according to some accounts, affected with phthisis—cured himself by a course of gymnastics. Thereupon he became a teacher of the gymnastic art, and established an institution at Athens, where he specially devoted his attention to the application of gymnastics to medicine; not, however, that he is to be regarded as the first who recognised the importance of bodily exercise in the preservation of health. It is possible, however, that he was from the first the master of a gymnasium; at any rate, he is the reputed inventor of what is called gymnastic medicine. He perceived the possible division of gymnastic exercises into three kinds: the military, which were practised for the purpose of acquiring skill and power in the use of weapons of war; the athletic, the object of which was the training of competitors for the public games; and the medical. His practice, if we may judge from the remarks in one of the Hippocratic treatises, seems to have partaken much of the characters of the water-cure and kinesipathy of the present day, in so far as it was often an injurious or ridiculous exaggeration of a valuable means of treatment. He is said to have killed several who were ill of fevers, with excessive walking and wrestling. "Pretending to overcome the fatigue occasioned by sickness through the means of another fatigue, he drew upon his patients sometimes inflammations, sometimes pains on their side," etc. Among the pupils of Herodicus is reckoned Hippocrates, who, if this be true, must have exercised his judgment with sufficient precision to distinguish those parts of the practice which he could adopt from those which were unsafe or absurd.

The Asclepiads of Cnidus in Asia Minor have the reputation of leading the way among their order in throwing off the veil of mystery which surrounded the practice of the art. Their system of studying disease—for they had established a system, such as it was—was based on a different plan from that of the priests of Cos. The Cnidians studied diagnosis; the Coans, semeiology and prognosis. To the subject of the difference in the doctrines of the schools, I shall have occasion to refer in the next lecture.

Ctesias, a Cnidian practitioner, is more celebrated as having been the author of a history of Persia than in relation to medicine. He is mentioned here, however, principally as an example of one of the Asclepiad order entering into public practice. According to Diodorus Siculus, he served in the war between Cyrus the younger and his brother Artaxerxes; and, being taken prisoner by the latter, was retained by this monarch, who appreciated his professional talents, as his physician during a period of sixteen years.

Having given an outline of the principal circumstances which had an influence in bringing about the institution of the public practice of medicine, I will now sum up and comment on the facts which have been brought forward in this lecture.

1. The circumstances which were chiefly operative in releasing the practice of medicine from the jealous grasp of the Æsculapian priests were, first, the adoption by the philosophers of medicine as a portion of general learning; and secondly, the usurpation of the functions of the practitioner by the managers and attendants of the gymnasia.

2. The philosophers both studied medicine as a branch of science, and also practised it as an art.

3. As a branch of general knowledge, the study of medicine was connected with that of nature. They sought to ascertain the influences which act on the body in disease as well as in health.

4. By their inquiries in the latter direction, they pointed out the necessity of a knowledge of anatomy to the comprehension of the functions of the body, and of physiology to the true comprehension of the phenomena of disease.

5. Their doctrines in physiology were derived in part from an application of their speculations regarding the elementary constituents of matter, and partly from dissections. That the latter formed a source of knowledge, is shewn both by the fact I have recorded of Democritus, and by the impossibility of otherwise explaining the notion of Alcmæon that respiration takes place through the ears.

6. There is no evidence, however, that they ever dissected the human subject; indeed, we may regard it certain that they did not do so, but that all their examinations were made on the bodies of animals.

7. We are therefore indebted for our earliest notions of anatomy and physiology, not to the Asclepiads, for they do not seem to have studied these, but to the philosophers. Empirical medicine and physiology thus arose from distinct sources; and although they have more and more approximated, yet their union is not even now perfect.

8. As a sort of counterpoise to the benefit conferred on medicine by the philosophers in introducing the study of physiology, must be adduced the crude speculations which they also introduced. I mean their doctrines of hot and cold, dry and moist, etc.; doctrines which tinge the writings of Hippocrates, though he was far from being altogether led by them; and which prevailed, in senseless application to diseases and their remedies, down to a late period.

9. There does not appear to have been any positive application made of the study of physiology to the practice of medicine by the philosophers. In their hands, actual practice was nearly the same as that of the Æsculapian and Egyptian priests, conjoined possibly with greater surgical skill. Having to deal with a public not ripe for the divulgence of a mystery, and desirous moreover of maintaining their own influence, the philosophers made their practice to consist ostensibly in attention to dietetic rules, in incantations, and in expiatory sacrifices.

10. The dispersion of the Pythagorean Society of Crotona, about 500 B.C., was the means of furnishing to Greece and the neighbouring countries a class of practitioners, by whom mystery was removed from the art of medicine.

11. The application of gymnastic exercises to medicine was a step from which both good and evil plainly arose. It was good, inasmuch as it drew attention to a valuable remedial

agent; but it was also productive of evil, as it gave rise to the abuse of the system in a manner precisely analogous to that in which various systems of charlatanism have been carried out in modern times.

12. The state of medical matters at which we are now arrived shows four influences at work, directly or indirectly, on the science of medicine. These are, (*a*) the empirical knowledge of the Æsculapian priests, and their study of disease *per se* in regard to its diagnosis, as at Cnidos, and in regard to its semeiology and prognosis, as at Cos; (*b*) the introduction of hypothesis by the philosophers; (*c*) the introduction of anatomy and physiology; (*d*) the application, more closely and extensively than hitherto, of a system of hygiene, consisting principally in dietetics and gymnastics.

Original Communications.

CASES OF IDIOPATHIC PNEUMOTHORAX, WITH REMARKABLE ABSENCE OF BAD SYMPTOMS: RECOVERY.

By JOHN THORBURN, M.D., Manchester.

THE first of the following two cases was read before the Medical Section of the Royal Manchester Institution, on February 1st, 1860, and the members expressed a wish that it should be published, on account of its remarkable character and of its bearings on the diagnosis and prognosis of a malady so commonly fatal. The second case was alluded to in the ensuing conversation by Dr. Noble, and was kindly communicated to me from memory by Mr. Walsh.

Pneumothorax is very properly held to be one of the gravest forms of affection to which the chest is liable, producing most violent symptoms at its onset, and ending, sooner or later, in a fatal result. We consider our patient's case as nearly hopeless from the outset; and even in those few instances where recovery ensues, we almost invariably see some other organic lesion which must independently lead to the same fatal termination. The following case is in every way exceptional.

CASE I. Mr. J. C., aged 22, was in perfect health up to the date of the present attack; that is to say, he was not himself conscious of any ailment, bodily weakness, or wasting; he had had no cough, hæmoptysis, pain, or other recognisable symptom of internal disease, and, being an intimate personal acquaintance of my own, I had every reason to consider him up to that time as of sound constitution. My reason for thus insisting on this point must be evident. His only previous illness had been a severe fever about ten years ago. He was on the eve of a voyage to America, and had consequently for some days had rather more exertion than usual. He had also, three days previously, indulged freely in rowing, to which he was not recently accustomed, though in former years he had been; he felt, however, little or no inconvenience at the time.

July 19th, 1859. Early in the morning he was awakened from a sound sleep by a sharp pain in the right side, accompanied by dyspnœa. It continued thus for two or three hours, and then, becoming less severe, he rose, dressed, and went to business in the City. In the afternoon, he first called upon me, and stated that he still felt considerable pain in the right breast and shoulder. It was experienced chiefly on deep inspiration. He had no cough, nor, when sitting in my consulting-room, any apparent dyspnœa, though he had rather a feeling of breathlessness. The pulse was quiet and regular (76). The skin was cool and moist; the tongue very slightly furred. As there seemed to be no evidence whatever of any acute inflammatory disease, I merely auscultated the top of the chest anteriorly. The percussion was fair on both sides; the respiration rather weak on the right, but without other alteration of quality or rhythm. Everything pointed to a simple attack of pleurodynia, consequent perhaps on the heat and exercise of rowing three days before. I prescribed a saline aperient, and a sinapism to the seat of pain.

July 20th. He called again, and expressed himself as a good deal better. The pain had moved about, and was now felt somewhat on the left side.

July 21st. I called on him in the morning, and found him almost quite free from pain, and considering himself well again. He had just come down stairs however, and his breathing seemed to me to be much too hurried. Bearing in mind the comparatively feeble respiration at the right apex, which might possibly be of tubercular origin, though a pleurodynic pain in the side could equally account for it, and knowing of his intended voyage, I desired him to allow me carefully to examine his chest. On doing so, I found to my intense surprise the following conditions. The left side was perfectly normal, except that the respiratory sounds were rather exaggerated. On the right side the percussion-sound in front was at the apex comparatively, though not to a marked degree, more resonant; lower down, it was very evidently so, and the increased resonance extended quite to the border of the false ribs. Behind and laterally the percussion note was quite tympanitic, and the tympanicity completely obscured the natural dulness of the hepatic region. On auscultation, the vesicular breathing was completely lost over the whole side, and was replaced at the apex by a clear hollow tone, with an equality of the inspiratory and expiratory periods; lower down, it gradually merged into a clear amphoric ring. The same loud amphoric sound was evident over the whole back and side. In addition there was audible with almost every inspiration a clear ringing click, as of water dropping into a deep well—the most beautifully marked *tintement métallique* imaginable. The impulse of the heart was also occasionally accompanied by the same sound, audible chiefly at the right back. The vocal resonance was perfectly amphoric, both spoken and whispering. Change of posture made no difference either in the percussion or auscultation. It was clear that he was labouring under complete pneumothorax of the right side, although, nevertheless, the pulse was not above 76, either now or at any other time; the tongue was clean and moist; the skin cool; there was no apparent dyspnœa when in bed; not a trace of cough; and hardly the slightest personal discomfort. I at once advised a second opinion; and Sir James Bardsley saw him with me in the afternoon. In spite of his long experience, he was equally astonished with myself at the great clearness of the physical signs and the total absence of concomitant bad symptoms.

The subsequent history may be given very briefly. Any active treatment was out of the question; and the only and self-evident measure consisted in preventing all unnecessary action of the part. This was done, and slight counterirritation was applied by means of iodine.

For a day or two the signs continued much the same, and the chest became a little bulged, as if the accumulation of air in the pleural cavity was increasing. In ten days, however, the metallic tinkling had quite disappeared, the percussion note also becoming less tympanitic gradually, commencing *from above*. The respiration and vocal resonance became *pari passu* less amphoric. He had never during this time one bad general symptom; and I may state again, that he was not aware of having once coughed during his whole illness.

August 31st. It was deemed advisable for him to go down to Scotland, having been going about a little for a fortnight without injury. At this time, the tympanitic percussion was quite confined to the lower and lateral part of the side. The rest was still rather comparatively over-resonant, and the breathing was nowhere yet quite normal. At some points it was faint and distant, though vesicular; at others it had still rather a blowing character. He came now under Dr. W. T. Gairdner's care, at Edinburgh, who kindly informed me from time to time of his straightforward progress. By

Nov. 8th. Dr. Gairdner became convinced that the lung was almost everywhere again in contact with the chest-wall, except perhaps at the extreme base; and that, in spite of the improbability, there was no perceptible evidence of tubercle whatsoever.

Jan. 20th, 1860. He had come back to Manchester, and I examined him very carefully. I must say that, if unaware of his previous history, I should have set his chest down as a very healthy one, rather better than the average. As it is, I can discern nothing more than a slight faintness of respiration at the base, and a rather too low extension of the thoracic resonance when in the recumbent position. He is strong and well, has gained flesh, can go through a long day's shooting without resting or fatigue, and may therefore, I think, safely be set down as perfectly recovered.

REMARKS. There are several points of interest in this case to which I may briefly allude. In every way it is a remarkable one, whether we consider its origin, symptoms, or termination. The usual cause of pneumothorax, setting aside traumatic cases, is undoubtedly the rupture of a tubercular softening;

more than 90 per cent. of the recorded cases arose in this way; and if we consider that those arising from other causes are, for that very reason, more frequently recorded, the true per centage will be much greater. In a very few instances does it arise from pulmonary abscess, cancerous softening, or gangrene; in the present, it is almost impossible to believe that any of these causes existed. The only imaginable one is phthisical softening; but if stethoscopic evidence, together with the undoubted absence of any phthisical symptoms, is worth anything, we must believe it to have been absent. The attack came on during sleep, without any known exertion, the only conceivable lacerating force being the rowing three days before. The hypothesis of a slight superficial emphysema, which had given way, were quite gratuitous. The spontaneous generation of air in the pleural cavity has not yet, in my opinion, been ever satisfactorily proved; and it would, at any rate, presuppose the presence of some inflammatory products in the pleura to be decomposed; moreover, I think, we have here almost positive evidence, from the physical signs, of a communication between the air in the lungs and that in the pleura. If compelled to hazard an opinion, I should suppose that, during the exercise of rowing, there had been some stress on the surface of the lung, giving rise to a minute extravasation of blood there, and that this had by disintegration ruptured into the pleural cavity three days afterwards. It is evident, from some points of the case, that some old adhesions exist, probably contracted in early youth; and this would easily account for an unequal tension on the surface during powerful exertion, or even for an inequality in its strength. Whatever be the precise *modus operandi*, it is extremely rare to meet with a case where the usual causes are so apparently absent, and still more unusual to be enabled by recovery to examine into their continued absence.

Another strange feature of the case, perhaps the most so of all, is the course of the general symptoms. We are all acquainted with the existence of latent pneumonia during the course of other diseases, and, without doubt, idiopathically also. That absolutely latent *acute* pleurisy, too, may occur, I have no doubt; for I remember watching a case under Dr. J. H. Bennett, in which we traced most accurately the steps of friction, effusion, reabsorption, and redux friction, although there were no febrile symptoms, and we could hardly persuade the patient that there was anything wrong with him. But for a state of pneumothorax suddenly to supervene on a healthy man, without a particle of fever or systemic disturbance, is, so far as I am aware, a complete novelty. There was certainly a pretty severe pain in the side at first, but not more than we usually find complained of in a sharp pleurodynic attack; and its speedy removal by a sinapism, with its shifting character, rendered it quite undiagnostic. The characteristic dyspnœa, too, of pneumothorax was quite absent. Certainly his short breathing caught the eye when he had just come down stairs; but during the time he lay in bed, and while the effusion of air was increasing, the number of respirations did not exceed 17 per minute—the standard of health—and which is usually exceeded in a simple catarrh. These are remarkable circumstances; and, taken in conjunction with the entire absence of cough throughout, with an unimpaired digestion, an unmoved pulse, and the absence of every other sign of chest-disease, they warrant us in asserting that there may exist such a thing as pneumothorax which, for all practical purposes, is absolutely latent; and that, not in a patient when the gravity of coexisting disease may mask its rise and progress, but in an otherwise strong and healthy man.

The pathological progress also and result of the case are by no means unworthy of notice; for, though there are cases on record, there are certainly very few where in nontraumatic pneumothorax the fistulous opening has closed, and all traces of air or fluid have disappeared from the pleura. Walshe mentions having seen only two such; and he recommends that when the rupture may have arisen from violent exertion, as in hooping-cough, the chest-wall should be punctured. In this case, it would certainly have been most injudicious. The presence of air in the pleura seems to have been quite innocuous; for neither at the commencement nor since have we any physical evidence of an appreciable amount of serum or pus. The tympanic percussion extended to the lowest possible limits, and the presence of metallic tinkling on inspiration necessitates but a mere film of fluid. In fact, the presence of this sound at all, taken with the absence of other signs of fluid, leads me to believe that the rupture must have been seated at the very base of the lung.

One marked peculiarity in the physical signs is worthy of notice, viz., the more evident presence of air at the base of the side, contrary to the natural tendency to seek the surface, and its persistence below after it had disappeared above. This can only be explained by the existence of old adhesions. If, as I suppose, the escape took place at the base, and if the air were thus restained downwards by a band of old false membrane, which stretched as the pressure increased, and allowed the upper lobe to collapse, it would fully account for my not finding more distinct evidence of the disease when listening, the first day, cursorily at the apex.

I cannot avoid remarking that this case eminently illustrates the necessity of making use of the stethoscope whenever it is practicable. With no history of any chronic chest disease, no cough, no febrile symptoms, and the speedy abatement of pain, how likely was it that no thorough chest examination should have been made; and yet there can be no doubt that the patient owes his life to its having been done, for the exposure of a sea voyage, with probable vomiting and discomfort, would have destroyed the possibility of the same favourable result.

Dr. W. T. Gairdner favoured me with some valuable observations on pneumothorax, and stated that he had gradually been arriving at the conclusion that, in a limited form, it is far from uncommon, and not nearly so dangerous to life as is usually supposed. He mentioned several cases where he suspected its partial occurrence and recovery, but always complicated with other fatal disease. This case is an undoubted one, and occurring under other circumstances. I have been unable to find another on record where the same conditions have been fulfilled of arising without assignable cause, of giving rise to no systemic disturbance whatsoever, and of disappearing in a few months, leaving the patient, as far as can be ascertained, in perfectly sound health. For this reason, I have thought it worthy of being somewhat fully detailed.

Case II. In the conversation on the preceding case, Dr. Noble mentioned having met some years ago with a somewhat similar one, in consultation with Mr. Walsh. The latter gentleman kindly favoured me, from memory, with its leading details. They are these:—

Mr. C. J., aged 37, had for many years enjoyed good health, with the exception of occasional dyspeptic attacks, up to April 18th, 1856. On that day he had a very unusual amount of exertion in his garden, though he felt no bad effect at the time. Next morning, while breakfasting hurriedly, he was seized with a severe pain in the right shoulder, and some shortness of breathing. Believing it to arise from flatulence, he walked into town, and, feeling worse rather than better, afterwards to Mr. Walsh's house. He prescribed a carminative draught, and advised him to keep quiet for the day. In the evening he grew worse, and the pain and dyspnœa increased. The physical signs of pneumothorax were now ascertained to be present, just as in the former case. He became very livid and prostrate, and for a few days was in a critical state. He then began to improve, and was soon able to go to the sea side. In two months all signs of air in the pleura had disappeared, and in six months the chest sounds were alike, and perfectly normal on both sides. He has since enjoyed capital health, and is now (four years after the attack) better than he was ever in his life previously, nor can Mr. Walsh detect a trace of stethoscopic abnormality on either side of his chest.

Remarks. Although this case did not present the same curious entire absence of dangerous and severe systemic disturbance as the former, it is nevertheless very interesting as confirmatory of some other points. There was the same lack of appreciable preceding organic lesion, and the subsequent four years have confirmed what might otherwise have been doubtful on this head. There was the same circumstance of a lapse of time between the only possible cause of disruption and the appearance of any symptom of its occurrence; and there was the same speedy and perfect recovery. It adds very greatly to my belief in a continued favourable prognosis for my own patient. I believe that such cases occur oftener than our medical literature would lead us to suppose, and if this could be satisfactorily proved, it might tend to save others from the same amount of absolute uncertainty which I confess to have felt as to the prognosis of my own case. I believe that Sir James Bardsley experienced exactly the same feeling as myself, that we had no precedent to guide us in giving an opinion upon the probable result of an undoubted case of pneumothorax where the patient had had no previous illness of any sort, and where he seemed, while in bed, to enjoy as perfect health and spirits, in every other respect, as ourselves.

SUCCESSFUL CASE OF OVARIOTOMY.

By W. L. WRATISLAW, Esq., Visiting Surgeon to the London Home.

THE following case occurred lately in the practice of Mr. I. B. Brown:—

J. B., aged 18, from Wisbeach, at the end of July 1859, after a slight attack of what was called "peritonitis", first perceived a swelling of the abdomen, low down on the right side. The medical man whom she consulted declared her to be pregnant, which she strongly denying, his partner saw her, and, after a careful examination, pronounced it to be ovarian dropsy. She then came up to a London hospital, where the opinion of pregnancy was endorsed by one of the physicians, and he even advised one of the pupils to listen for the fœtal *bruit*. The physician-accoucheur, being consulted, pronounced it to be a bad form of ovarian disease, of such a kind as not to admit of treatment; especially condemning extirpation. She was subsequently sent to Mr. Baker Brown, who, on examination, pronounced it to be multilocular ovarian dropsy of rapid growth. He pointed out extirpation as the only remedy, telling her at the same time that the chances were against her recovery. She, however, subsequently elected, her mother and friends consenting, to have the operation performed. She was therefore admitted into the London Home, and put under a preparatory course of treatment, consisting of warm baths, alterative tonics, and mild aperients.

March 22, 1860. She was placed under the influence of chloroform, and Mr. Brown proceeded to operate. He made an incision, about four inches in length, from the umbilicus, and gradually cut down upon and opened the peritoneum. The cyst was exposed, and, on passing the hand round, it was found to have very few adhesions. It was then punctured with a large trocar; but, from the numerous cysts of which it was composed, as well as the thickness of the contained fluid, it could not be much reduced in size. The incision was therefore slightly extended, and the mass drawn out, the pedicle being long and narrow. A long needle, armed with double Indian twine, was passed through it, carefully avoiding the blood-vessels, and tied in two portions. The incision was then closed with iron-wire sutures at short intervals; the ligature of the pedicle, not the pedicle itself, being brought out at the lower extremity. Lint was placed over the cut, and a bandage round the abdomen, and she was removed to bed. About two hours afterwards, as she complained of some pain, she had a grain of opium as a suppository, and linseed-meal poultices applied over the abdomen. In the evening the pulse was 106; she only complained of "throbbings". The opium suppository was ordered to be repeated as necessary.

March 23rd. She slept at intervals during the night. Early in the morning, she was three times sick. The pulse was 106; the tongue was slightly coated; the skin moist. She was ordered an effervescing mixture, with hydrocyanic acid. She took milk, barley-water, toast and water, and ice. The opium suppository was ordered to be applied when necessary.

After this, she went on well, and on May 3rd was quite well, and had gained flesh. The incision was firmly united on March 31; and on April 5, the pedicle came away. A small abscess was formed in the middle of the incision and was opened.

Mr. Brown did not use the clamp in this case, having found, in three previous successful cases, that vicarious menstruation took place from the incision where the pedicle adhered to the surface, causing much annoyance. Mr. Brown therefore fell back upon Dr. Clay's plan of using Indian twine, and allowing the pedicle to return into the pelvic cavity.

I may observe, having had charge of the five cases of ovariotomy which have been operated on in the London Home during the past two years (three of which have been successful), that the plan of allowing the pedicle to be loose in the pelvic cavity, and not held up tight, as by the clamp, entirely does away with the "dragging", which has otherwise been much complained of by the patient.

Archer Street, Westbourne Grove.

UNIVERSITY OF LONDON. Her Majesty has been pleased to nominate the Right Hon. Robert Lowe, Richard Quain, M.D., and James Paget, Esq., F.R.S., to vacancies in the Senate of this University, caused by the deaths of Bishop Maltby, Lord Macaulay, and Mr. M. T. Baines.

Reviews and Notices.

ON ASTHMA; ITS PATHOLOGY AND TREATMENT. By HENRY HYDE SALTER, M.D., F.R.S., Fellow of the Royal College of Physicians; Assistant-Physician to Charing Cross Hospital, and Lecturer on Physiology and Pathology at the Charing Cross Hospital Medical School. Pp. 372. London: Churchill. 1860.

DR. SALTER must by this time be well known to the readers of the British medical periodicals as the author of several highly valuable essays on various points connected with asthma; several of which have appeared in this JOURNAL. It would have been a matter to be regretted, had these communications been allowed to lie scattered here and there in the pages of our weekly and monthly literature; but all anxiety which may have been felt on this ground is now removed, by their collection and arrangement, together with such matter as was required for the perfection of the work, into the complete and systematic monograph before us.

The book contains fifteen Chapters and an Appendix. The subjects of the Chapters are:—I, Inquiry into the Tenability of the Theories of Asthma; II, The Pathology of Asthma—its Absolute Nature; III, and IV, Clinical History of Asthma; V, Varieties of Asthma; VI, Ætiology of Asthma; VII, Consequences of Asthma; VIII, IX, X, and XI, Treatment of the Asthmatic Paroxysm; XII, Dietetic and Regiminal Treatment of Asthma; XIII, The Therapeutical Influence of Localities; XIV, Hygienic Treatment of Asthma; XV, Prognosis of Asthma. The Appendix consists of eleven narrated cases, and forty-four tabulated cases.

In the first chapter, Dr. Salter examines the theories which have been held as to the nature of asthma. These may be briefly enumerated as follows:—1, That contraction of the bronchial tubes is not necessary to produce asthma (Laennec, Copland, and Walshe; regarding whose theories Dr. Salter holds that the "asthma with puerile breathing" of Laennec, the "nervous asthma" of Copland, and the "hæmic asthma" of Walshe, are forms of dyspnœa, not true asthma); 2, that the asthmatic paroxysm is an effort to get rid of irritating matter in the air-tubes (Dr. Bree); 3, that asthma is a phenomenon of a peculiar form of bronchitis (*bronchite à râles vibrants*, M. Beau); 4, that the essence of asthma is humoral—that each attack depends on the development of some specific humoral disturbance; 5, that asthma depends upon a poisoning of the nerves of respiration or of the portions of the nervous centres with which they are connected, by a particular *materies morbi* (Dr. Todd); 6, that one form of asthma is nothing but the dyspnœa of emphysema, and that another is but a spasm or suspension of the normal action of the muscles of inspiration (Dr. Budd); 7, that asthma depends not upon spasm, but on paralysis of the bronchial tubes; 8, that there is no such thing as asthma as a substantive disease.

Having ably demonstrated the insufficiency of these numerous and often conflicting hypotheses, the author proceeds in the second chapter to develope what he believes to be the true pathology of asthma. His views on this subject are:—

"1. Asthma is essentially, and, with perhaps the exception of a single class of cases, exclusively, a nervous disease; the nervous system is the seat of the essential pathological condition.

"2. The phenomena of asthma—the distressing sensation, and the demand for extraordinary respiratory efforts—immediately depend upon a spastic condition of the fibro-cells of organic or unstriped muscle, which minute anatomy has demonstrated to exist in the bronchial tubes.

"3. These phenomena are those of excito-motory reflex action.

"4. The extent to which the nervous system is involved differs very much in different cases, being in some cases restricted to the nervous system of the air-passages themselves.

"5. In a large number of cases the pneumogastric nerve, both in its gastric and pulmonary portions, is the seat of the disease.

6. There is a large class of cases in which the nervous circuit between the source of irritation and the seat of the resulting muscular phenomena involves other portions of the nervous system besides the pneumogastric.

"7. There are other cases in which the source of irritation, giving rise to the asthmatic paroxysm, appears to be central—in the brain; consequently, in which the action, though excito-motory, is not reflex.

"8. There is yet a class of cases in which the exciting cause of the paroxysms appears to be essentially humoral." (Pp. 24-5.)

Each of these propositions in order is supported by arguments derived from the observation of phenomena connected with asthma; and, towards the conclusion of the chapter, the author expresses his opinion that—

"The peculiarity of the asthmatic essentially consists in a morbid proclivity of the musculo-nervous system of his bronchial tubes to be thrown into a state of activity: the stimulus may be either immediately or remotely applied, but in either case would not normally be attended by any such result. There is no peculiarity in the stimulus; the air breathed is the same to the asthmatic as to the non-asthmatic, the ipecacuan powder, the hay effluvium, is the same in both." (P. 59.)

There seems to us to be a little obscurity at this part on one point. At page 57, Dr. Salter recognises in asthma a morbid activity of the natural endowment of the muscular furniture of the bronchial tubes to contract under certain circumstances and on the application of certain stimuli—"*the irritability of the muscle is exalted*"; so that he here appears to attribute asthma to exaggerated tendency in the muscle itself to contract. But, at p. 59, he says that probably there is no "peculiarity in the irritability of the bronchial muscle: the peculiarity is confined to the link that connects" (the stimulus applied and the muscle)—"*the nervous system, and consists in its perverted sensibility*, in its receiving and transmitting to the muscle that of which it should take no cognisance." That the latter, however, is in reality his opinion, is shewn by the propositions which we just now enumerated, and from some observations in the twelfth chapter.

In the third chapter—that on the Phenomena of the Paroxysm—Dr. Salter describes the precursory symptoms—these frequently being drowsiness, sometimes extreme wakefulness, or disorder of stomach, etc.: he then notices and explains the constancy of the time at which the paroxysm occurs (generally from 3 to 6 A.M.), and the symptoms frequently attendant—profuse diuresis and neuralgic pains. He then goes on to describe the paroxysm from its commencement to its acme, and remarks on the effect produced on the heat of the body, on the pulse, and on the muscular system of respiration. The results of auscultation are then noticed: they shew that (*a*) there is almost perfect stagnation of air in the chest, in spite of the violent respiratory efforts; (*b*) the tubes affected are generally very small; (*c*) tubes in all parts of the chest are simultaneously affected; (*d*) the points of constriction are constantly changing place. The duration of the attack forms then the subject of more remarks; and the author then notices the expectoration with which the paroxysm terminates, and gives an account of the microscopical and chemical examination of the mucous pellets coughed up. He believes that the spherical, homogeneous, or slightly granular bodies, without cell-walls or nuclei, formed in the expectorated mucus, are probably large rapidly generated cytoblasts. "It would appear", he says, "that the congested mucous membrane in asthma is the seat of an exuberant development of cell-germs, excessive in size as in number, and so soft that the slightest pressure or traction alters their forms."

The views of Dr. Salter on the Phenomena of the Intervals, as expressed in the fourth chapter, have already been stated by him in this Journal (July 16 and August 13, 1859). The same is the case with the sixth chapter, on the Ætiology of Asthma (July 9, 1859); with the seventh chapter, on the Consequences of Asthma (August 27 and September 17, 1859); with the tenth chapter, on the Treatment of the Asthmatic Paroxysm by Sedatives (October 1, 1859); and with the fifteenth chapter, on the Prognosis of Asthma (June 18, 1859).

In the fifth chapter, the author describes the Varieties of Asthma. Basing his classification on differences of causes, he arranges the varieties according to the following scheme.

A. Idiopathic, uncomplicated, or *Spasmodic* Asthma.
  1. Exciting cause manifest.
    Intrinsic Asthma; *i.e.* irritant applied to the lungs themselves.
      I. *Asthma from fog, smoke, fumes of various kinds.*
      II. *Ipecacuan Asthma.*
      III. *Hay Asthma.*
      IV. *Asthma from animal emanations.*
      V. *Asthma from certain airs.*
      VI. *Toxhæmic Asthma.*
    Excito-Motory, or Reflex Asthma.
      I. *Peptic Asthma.*
      II. *Asthma from organic nervous irritation.*
      III. *Asthma from peripheral cerebro-spinal irritation.*
    Central Asthma.
      Epileptic, *Emotional*, etc.
  2. No apparent exciting cause of attacks.
    Periodic Asthma.

B. Symptomatic, complicated, or *Organic* Asthma.
  1. Organic Cause *Vascular.*
      I. *Asthma complicating bronchitis, common humid asthma—senile Asthma.*
      II. *Cardiac Asthma.*
  2. Organic Cause *Nervous.*
      Heberden's case, etc.

In the eighth chapter, Dr. Salter treats of the Treatment of Asthma by Depressants, under which head he includes ipecacuanha, tobacco, and tartar-emetic; and in the ninth, he treats of Stimulants. In regard to the latter, he notices the fact that sleep favours the development of the asthmatic paroxysm; and, after observations on the remedial effect of strong coffee and of mental emotion, he concludes—

"That, since the abeyance of the will favours, in proportion to the degree of that abeyance, the development of asthma, and since the effect of strong coffee is to dispel such suspension or depression of volition and restore the will to its wonted (or even an unwonted) activity, it is by thus exalting the will, and so disfavouring the development of excito-motory action, that this remedy relieves asthma.

"That the same interpretation applies to the relief of asthma by all other stimulants whatever.

"That thus strong coffee and mental excitement, although apparently so different, belong to the same category of remedies for asthma." (P. 187.)

The eleventh chapter is occupied with a notice of the treatment of asthma by the Inhalation of the Fumes of Burning Nitre-Paper—a remedy which Dr. Salter finds to have been in use, to some extent, for a number of years, but which he believes of more value than has generally been accorded to it.

In the twelfth chapter, the Dietetic and Regiminal Treatment of Asthma is discussed. "In no direction", says Dr. Salter, "is asthma more accessible than through the stomach." He notices that asthmatics are generally dyspeptics; and believes that frequently the symptoms imply that the stomach disturbance is one of deranged pneumogastric innervation—the dyspeptic symptoms being the manifestation of the gastric portion of the deranged innervation, and the asthma of the pulmonary portion. The connection of the stomach with asthma is shewn in various cases; (*a*) by the alternation of dyspeptic with asthmatic phenomena; (*b*) by the frequency with which attacks of asthma may be traced to errors in diet; (*c*) by the tightness of breathing that in some persons with asthmatic tendency follows every meal; (*d*) by the gastric symptoms that are often premonitory of an attack.

The rules which the author lays down for the dietetic treatment of asthma are thus summed up:—

"1. The tendency of food to produce asthma is greatly increased by the state of sleep; therefore nothing should be taken after such a time as digestion and absorption may be completely over in,—the stomach and small intestines, and even the lacteals, quite empty,—before bedtime.

"2. This long fast before sleep involves a long period of inanition; therefore the asthmatic should break his fast early and heartily.

"3. The quantity of food the asthmatic takes should be small; therefore it should be highly nutritious.

"4. As a rule, the tendency of food to produce asthma is in direct proportion to its general indigestibility; therefore the asthmatic's diet should be of the simplest and plainest kind.

"5. But there are some articles of diet that have a special tendency to produce asthma; therefore from these the asthmatic should exercise the strictest abstention." (P. 229.)

The Therapeutical Influence of Locality, as discussed in the thirteenth chapter, is one of the most remarkable phenomena connected with asthma. It seems almost entirely an empirical fact that change of residence will prevent the recurrence of the paroxysms; why, neither Dr. Salter, nor, we believe, any one else, can as yet give a rational explanation. Referring our readers to the book itself for the histories of the interesting cases bearing on the subject, we give the conclusions at which the author has arrived:—

"1. Residence in one locality will cure, radically and permanently cure, asthma resisting all treatment in another locality.

"2. The localities that are the most beneficial to the largest number of cases are large, populous, and smoky cities.

"3. This effect of locality depends probably on the air.

"4. The worse the air for the general health, the better, as a rule, for asthma; thus the worst parts of cities are the best, and conversely.

"5. This is not always the case, the very reverse being sometimes so,—a city air not being tolerated, and an open pure air effecting a cure.

"6. There is no end of the apparent caprice of asthma in this respect, the most varying and opposite airs unacountably curing.

"7. Consequently, it is impossible to predict what will be the effect of any given air, but that probably the most opposite to that in which the asthma seems worst, will cure.

"8. Some of these differences determining the presence or cure of asthma appear to be of the slightest possible kind, arbitrary and inscrutable.

"9. The mere conditions of locality appear to be adequate to the production of asthma, in a person whose disposition to it was never before suspected, and who probably would never have had it had he not gone to such a locality.

"10. Consequently, many healthy persons, who never have had asthma and never may, probably would be asthmatics if their life had been cast in other localities.

"11. *Possibly* there is no case of asthma that might not be cured if the right air could only be found.

"12. The disposition is not eradicated, merely suspended, and immediately shows itself on a recurrence to the original injurious air.

"13. Change of air, as change, is prejudicial.

"14. From the caprice of asthma, the constancy of the results in any given case is often deranged." (Pp. 260-1.)

In the fourteenth chapter, on the Hygienic Treatment of Asthma, the author adverts to the effects of exercise, the shower-bath, tonics, avoidance of cold, and regularity of life, as important measures to be carried out.

Dr. Salter has in his work given a most fair view of our knowledge of the circumstances relating to asthma. In reading it, we see at once what we may assume as known, and, what is of no less importance, we see also what we do *not* know regarding this capricious and distressing disease. Any practitioner who has an asthmatic under his care will be likely to do good both to himself and his patient by perusing it; and if on any insufficiently determined point his opportunities of observing have been greater than those of the author, he cannot do better than contribute his share towards the perfection, in future years, of the task which Dr. Salter has undertaken with so much zeal and ability.

ON THE RADICAL CURE OF VARICOCELE BY SUBCUTANEOUS INCISION. Read before the Medical Society of London. By HENRY LEE, Surgeon to King's College Hospital; Senior Surgeon to the Lock Hospital and Asylum, etc. Pp. 24. London: Churchill. 1860.

THIS pamphlet consists of a paper read some time ago before the Medical Society of London, and of which an abstract was published at page 214 of this JOURNAL for March 17 in the present year. Surgeons will be indebted to Mr. LEE for thus placing before them the description of the simple though valuable procedure which he recommends.

The following is the operation, as described by Mr. Lee, for the radical cure of varicocele:—

"The patient usually takes a little chloroform—sufficient to render him, for a moment, comparatively careless with regard to pain, but never sufficient to render him in any degree insensible. The scrotum, on the side of the varicocele, is then taken between the fingers and thumb, and the vessels allowed to glide one by one out of the hand. Presently the vas deferens will escape, and may always be known by its peculiar hardness. As soon as this is separated from the other vessels, a needle may be introduced opposite the point of the thumb, and made to pass through the scrotum to the point of the fingers. The needle thus introduced, passes between the vas deferens and a bundle of spermatic veins; a figure of '8' ligature is then passed, not very tightly, round the ends of the needle, and tied; the point of the needle may then be cut off. The same thing is repeated, either half an inch or an inch lower down, or higher up, and the patient goes to bed. If the ligature is not drawn tight, he generally suffers very little pain.

"On the third day, or at such an interval as may be necessary, indicated by the resistance afforded by the affected veins, the scrotum is held as before; and so soon as the vas deferens escapes from between the finger and thumb, a very thin knife is introduced, with its edge directed upward or downward. This passes, like the needles, between the vas deferens and the dilated veins. The edge of the knife is then turned forward, and the cluster of veins divided towards the skin. In doing this, it is convenient to place the fleshy part of the thumb of the right hand over the veins, in order to prevent them yielding before the knife. When the knife is introduced, care should be taken that it is not passed below more veins than are included in the ligatures.

"A little blood sometimes flows out of the wound made by the knife, but this in general amounts to a very insignificant quantity.

"Another interval of a couple of days now takes place, and then the ligature over the needle is cut through. The end of each needle is cut short off, and the remainder drawn out with a pair of forceps. A day or two after this, the patient may get up and resume his usual occupation; some swelling is left on the points of division, but this very soon subsides into a firm knot, which involves all the divided branches, and effectually prevents them from again becoming enlarged.

"With nervous patients, where it may be desirable to complete the operation at once, the division of the veins may be made immediately after the introduction of the needles. Some slight hæmorrhage into the cellular tissue will occasionally follow, and may by distending the parts around the ligature give some pain, but it in no way interferes with the ultimate favourable termination of the case." (Pp. 19-21.)

A MANUAL OF BOTANY; BEING AN INTRODUCTION TO THE STUDY OF THE STRUCTURE, PHYSIOLOGY, AND CLASSIFICATION OF PLANTS. By JOHN HUTTON BALFOUR, A.M., M.D., F.R.SS.L.&E., Professor of Medicine and Botany in the University of Edinburgh, and Regius Keeper of the Royal Botanic Garden. New Edition, revised by the Author. Illustrated by numerous Engravings. Pp. 703. Edinburgh: A. and C. Black. 1860.

THIS is a new and revised edition of a work which is already well known as one of our most complete text-books of botanical science. No student of botany, especially of vegetable organography and physiology, should be without it. We are glad to see that Professor BALFOUR has appended a glossary of the "hard words"; of which also, where they occur in the body of the work, he gives the Latin and Greek origins.

The Causes and Treatment of Imperfect Digestion. By Arthur Leared, M.B., M.R.L.A., Member of the Royal College of Physicians, London; Physician to the Great Northern Hospital, and to the Royal Infirmary for Diseases of the Chest, etc. Pp. 224. London: Churchill. 1860.

Dr. Leared classifies dyspepsia in the following way:

1. Accidental; *i. e.*, produced in the healthy subject by accidental causes.
2. Habitual: comprising—
   - *a.* Slow Digestion, or Simple Dyspepsia;
   - *b.* Undue Acidity in Digestion—Dyspepsia with Acidity;
   - *c.* Painful Digestion—Digestion with Gastric Pain, and frequently Tenderness on Pressure;
   - *d.* Foul Digestion—Dyspepsia with Fœtid Eructations.

In regard to these forms, the author describes the causes, symptoms, and treatment, founding his remarks mainly on his own experience.

The book contains a good deal of practical information in a small space; and the busy practitioner may often, with little trouble to himself, derive from it some useful instruction as to the management of any case of dyspepsia which he may have under his care.

British Medical Journal.

SATURDAY, JUNE 2nd, 1860.

WHAT ARE THE LEGAL RESPONSIBILITIES OF THE INSANE?

The old and much debated question, What are the legal liabilities of the insane? has just been answered by the Home Secretary in a very singular manner. It will be remembered that in October last a young Brazilian seaman was convicted and sentenced to death at the Central Criminal Court, of having murdered on the high seas one Philip Barker, his captain. There were certain circumstances, however, with respect to the perpetration of the deed—for we will not call it crime—which led the authorities to suspect the state of the man's mind, and he was reprieved from time to time, in order that inquiries might be made at Rio de Janeiro with respect to him. These inquiries eventuated in a remission of the capital punishment; and it was of course expected that he would, as a criminal lunatic, be detained in Bethlem during Her Majesty's pleasure. To the astonishment, however, of every one who has watched the case, the Home Secretary has decided that he shall undergo the punishment of penal servitude for life! On what grounds such an extraordinary decision has been arrived at, we are utterly at a loss to know. Either Annois was perfectly insane at the moment of cutting off the head of his victim, or he was not—in the former case he richly deserved hanging, in the other he did not deserve to be transported.

It is said that the great quality of the English people is the moderation of their views, and the good sense with which they compromise matters in all cases of extreme opinion. Possibly Sir Cornewall Lewis, puzzled by the conflicting opinions of the surgeons and the advanced alienist physicians relative to the criminal responsibility of the insane, determined to cut the Gordian knot in this case by passing an intermediate sentence. He may also quiet his conscience by saying that, after all, penal servitude for life, with a chance of a ticket of leave in ten years, is a lighter punishment than that of being hopelessly immured in a lunatic asylum. Possibly so. But what if Annois should, on any future occasion, be seized with another frenzy, and should cut off the head of one of the unsuspecting turnkeys, who may not be on his guard against the attacks of a madman? In such a case, the homicidal act would clearly lie at the door of the individual who, going out of his province, determined to place the perpetrator in the category of a prisoner, instead of that of a lunatic.

Compromise may be a very good thing in mere matters of opinion; but it will never do in answering the very important question whether a man is to be considered a murderer or a madman. Annois' deed did not differ, as far as we can see, from that of Whitworth, the unfortunate gunner of Sandown Fort, who cut the throats of his wife and six children. It was a sudden act of frenzy—the minds of both men having been clearly unhinged before the perpetration of the tragedy. We will venture to say Whitworth will not be hung; and we trust he will not be sentenced to penal servitude, unless the Home Secretary is determined to prepare a fresh horror for the public eye, and a fresh scandal for the lawyers.

THE JUDGES' VIEWS OF THE MEDICAL ACT.

The Court of Queen's Bench have just given a decision relative to the Medical Act, which will be read with much interest, not to say concern, by the profession. It will be remembered that on the 12th of October last, one Frederick Woodcock Pedgrift was convicted at the Halesworth petty sessions in the penalty of £10 and costs, for having wilfully and falsely pretended that he was a surgeon contrary to the Medical Act. Against this decision he has appealed to the judges of the Court of Common Pleas successfully. The case against Mr. Pedgrift was, that he had placed a plate on his door on which was engraved "Mr. Pedgrift, Mr. Irwin, Surgeon-Accoucheur", and this the Halesworth justices held to be an assumption that he had described himself as a surgeon, which in their opinion was a contravention of Clause xl of the Medical Act. It may be urged that they were grammatically wrong in their decision, inasmuch as, Mr. Irwin being a member of the College, the word surgeons should have been used to clearly render Mr. Pedgrift liable; but with this technical objection we do not wish to deal. The opinion of the Court in reversing the decision is, however, a matter of real importance. The Lord Chief Justice Erle, Mr. Justice Williams, and Mr. Justice Byles, in giving judgment, said that the statute was of extremely wide importance, but the conviction was upon very scanty facts; that there was nothing to show that the appellant was not in practice as a surgeon before the Medical Act passed, or that he had not a diploma or other qualification so as to give him a right to use the title "surgeon"; and that the proposition that every person who calls himself a "surgeon" without being on the medical register was liable could not be sustained. Consequently the conviction was quashed.

What the fact of the appellant's having been in practice before the passing of the Act, provided he was unqualified, could have had to do with the justice or law of the magistrate's decision, we cannot perceive. We are told, indeed, by Sir B. Brodie, that any man had as much right to call himself a surgeon as an engineer before the passing of the Act; but we

have yet to learn that any pretender may claim exemption from the law, simply because he had acted as a quack before its enactment. Again, we thought that the onus of proving the possession of a qualification lay upon the person accused of having practised without one. If this is not so, we do not see how any quack can be convicted, as it is impossible for any Registration Society to prove a negative.

We must confess this decision bears out the opinion of Mr. Steele in a letter to be found in our correspondence column, that the success or failure of a prosecution very much depends upon the widely differing opinions of the judges who may happen to adjudicate upon the case. As that gentleman very justly says, it is highly necessary that registration should be made obligatory upon all gentlemen in practice. An amendment of this kind would clear the path of many difficulties in the way of detecting impostors. It would also be highly desirable to cause all the licensing bodies and universities to return to the Registrar, under pain of a penalty, a list of all new admissions within so many days of their having been made. If this were done, the ground on which illegal practitioners stand would be very much narrowed, and the trouble of prosecuting societies very much lightened. With these emendations in the Act, the suggestion of the Northamptonshire Medical Registration Association (published in our last), that the performance of the ordinary duties of a medical man with a view to gain should be held a fineable offence, would indeed be invaluable, provided the legislature would adopt it.

The wording of the present clauses with regard to illegal practice is, we must confess, too vague, and leaves too much to the common sense of the magistrates—a sense which we see is not at all respected by the superior courts. There can be no doubt the quacks will come forth in bolder colours, now that they see they have so many chances of escape in courts of appeal; and it would be better, as Mr. Steele says, that Clause XL were altogether a dead letter, than that it should tempt Registration Associations to unsuccessful prosecutions. The more this matter is discussed, however, the better we shall be prepared to come before the Legislature for an amendment of the Medical Act, which is now inevitable.

THE WEEK.

A CASE illustrative of the remarkable susceptibility of some constitutions to the physiological effects of drugs, and of the perils into which the medical man may thereby be led, has lately been the subject of a coroner's inquest at Brompton, near Chatham. It appears that Mr. A. P. Fowler, a gentleman residing at that place, had an attack of rheumatic fever, for which he was attended by Dr. W. Burton. To relieve the pain which accompanied the disease, draughts were occasionally given, containing half a grain of acetate of morphia with half a drachm of tincture of henbane. One evening, Dr. Burton sent three pills, each containing half a grain of opium. At his visit next day, finding that the opium had had no effect, he prescribed pills containing each one-third of a grain of morphia, one to be taken every hour. At 7 P.M. on the same day, four pills having been taken, Dr. Burton found his patient dying, evidently from the effect of the opium. Dr. Martin, who visited the deceased before his death, fully approved the treatment followed by Dr. Burton. Dr. A. S. Taylor said the case was one of a very extraordinary character, as the deceased had only taken a grain and a third of opium, spread into four different doses; whereas four grains, taken at once, was the smallest dose known to kill a man. The average dose of opium usually given to an adult was from half a grain to two grains. The deceased died from an accumulation of opium in his system. In his opinion, Dr. Burton had exercised great caution in giving the small doses he did, when other practitioners would have exceeded them. The jury immediately returned a verdict, "That the deceased died from the accumulated effects of opium, administered to him for the treatment of rheumatic fever; and that we consider, from the medical evidence which has been produced, that Dr. Burton was justified in following out the treatment in the way he did, and exercised more than ordinary skill."

At page 425, we give a rather full, and, we fear, in the opinion of some, a tedious, account of a case which has lately occupied the attention of the medical public in India. We briefly adverted to the subject a few weeks ago; but it has occurred to us, on subsequently reading with care the long history, occupying a considerable part of the *Indian Lancet*, which had at the time of our first notice just reached us, that a fuller statement of the course followed towards Dr. Beetson would be desirable. Without following the *Indian Statesman* in sundry personal attacks on Dr. Macpherson, which we have omitted as irrelevant to the question, and with a recollection of having heard of his services in the Crimea, we must say that his conduct, in the case of Dr. Beetson, appears to have been lamentably deficient in openness and in courtesy. It would surely have been more after the English mind, if he had gone to Trichinopoly as the open enemy of Dr. Beetson. But, far from this, it would seem that he met Dr. Beetson under the appearance of friendship, while at the same time he was secretly endeavouring to collect materials for charges against him. As to Dr. Beetson himself, the charge of immorality was very properly dismissed by the Court of Inquiry. Allowing that in past times his conduct may not have been altogether such as is expected of a man holding a high public position, and who ought to give a good example, still the testimony of the witnesses shows, that at the time when the charge was made, he was judged to be a fit member of respectable society. But, if his conduct had been previously immoral, why were not the authorities properly acquainted with it long before Dr. Macpherson's visit? As to the charge of professional incapacity, we have conflicting evidence; but the means taken to support it by the addition of the untenable accusation to which we have already referred, the testimony of General Budd and several surgeons of the Madras Army, and even some of the testimony of Dr. Macpherson himself, all greatly shake our belief in its strength. We are, therefore, compelled to the conclusion, that Dr. Beetson has been unjustly submitted to what may be called an act of persecution. The importance of the subject, however, does not rest entirely with its personal application to Dr. Beetson. It is one affecting the public service; for who, we would ask, can hold a responsible appointment with the least comfort and encouragement, or perform its duties efficiently, if he is liable at any moment to be made the subject of secret inquiry and accusation, and to have the first intimation of the same in the shape of an immediate demand for his resignation?

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Twenty-Eighth Annual Meeting of the British Medical Association will be holden in Torquay, on Wednesday, Thursday, and Friday, the 1st, 2nd, and 3rd days of August.

President—JAMES R. W. VOSE, M.D., F.R.C.P., Liverpool.

President-elect—C. RADCLYFFE HALL, M.D., F.R.C.P.L. and E., Torquay.

It is requested that all members who propose to read papers will communicate with

PHILIP H. WILLIAMS, M.D., *General Secretary.*

Worcester, March 29th, 1860.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
YORKSHIRE. [Annual Meeting.]	Sheffield.	Thursday, June 7th.
SOUTH EASTERN. [Annual Meeting.]	Town Hall, Maidstone.	Wednesday, June 13th, 12½ o'clock.
MIDLAND. [Annual Meeting.]	The Exchange Rooms, Nottingham.	Thursday, June 14.
LANCASHIRE AND CHESHIRE. [Annual Meeting.]	Manchester.	Thursday, June 28th.
NORTH WALES. [Annual Meeting.]	Royal Hotel, Rhyl.	Tues., July 3rd, 1 P.M.

[To prevent delay, Reports of Branch Meetings should be sent direct to the office, 37, Great Queen Street.]

EAST YORK AND NORTH LINCOLN BRANCH: ANNUAL MEETING.

THE Fourth Annual Meeting of this Branch was held at the Hull Infirmary, on Thursday, May 24th, at half-past one P.M. T. Sandwith, M.D., of Beverley, having left the Chair, it was taken by W. H. EDDIE, Esq., of Barton, the President for the ensuing year. There were also present: J. Bell, L.R.C.P.Ed. (Grimsby); J. P. Bell, M.D. (Hull); Sir H. Cooper, M.D. (Hull); R. M. Craven, Esq. (Hull); J. Dix, Esq. (Hull); H. Gibson, Esq. (Hull); R. Hardey, Esq. (Hull); J. Hill, Esq. (South Cave); J. F. Holden, Esq. (Hull); T. Jackson, Esq., (Welton); K. King, M.D. (Hull); J. A. Locking, Esq. (Hull); J. Morley, Esq. (Barton); H. Munroe, M.D. (Hull); H. Sandwith, M.D. (Hull): and as visitors Messrs. Arden, Brownridge, Kevern, H.M.S. *Cornwallis*, and Dr. McMillan.

New Members. H. Munroe, M.D., and R. L. Sleight, Esq., both of Hull, were elected members of the Branch.

Officers for 1860-1. The officers appointed for the ensuing year are as follows: *President-Elect*, Sir H. Cooper, M.D. *Representative in the General Council*, J. P. Bell, M.D., Hull. *Honorary Secretary*, H. Munroe, M.D., Hull. *Committee*, R. M. Craven, Esq.; J. A. Locking, Esq.; H. Sandwith, M.D.; R. Hardey, Esq.; J. P. Bell, M.D.; J. Dix, Esq.; and O. Daly, M.D.—all of Hull.

The late Secretary. A vote of thanks was presented to the late Honorary Secretary, Mr. J. A. Locking, for the services rendered by him to the Branch.

Next General Meeting. It was decided to hold the next general meeting at Barton.

Papers. The following communications were made:—

1. Case of Abnormal Gestation. By R. Hardey, Esq.
2. On Rigor Mortis of the Fœtus in Utero. By J. Dix, Esq.
3. Two Cases of Irregular Distribution of the Internal Circumflex Branch of the Arteria Profunda Femoris. By K. King, M.D.
4. Case of Tetanus. By J. Hill, Esq.

Above twenty members of the Branch and their friends, including Messrs. Anderson (Hessle), Keetley (Grimsby), Hobson (Kirk Ella), Anningson and Henley (Hull), dined together at Glover's Hotel; Mr. Eddie acted as Chairman, and Dr. Sandwith of Beverley as Vice-Chairman.

SUBSCRIPTIONS FOR THE PRESENT YEAR.

DR. WILLIAMS regrets that the following names were inadvertently omitted from the second list—

Banning, T. H., M.D., Liverpool.
Pritchard, H., Esq., Fairfield, Liverpool.
Skinner, T., M.D., Liverpool.

Worcester, May, 1860.

LANCASHIRE AND CHESHIRE BRANCH.

THE twenty-fourth annual meeting of this Branch will be held at Manchester, on Thursday, June 28th, under the presidency of M. A. EASON WILKINSON, M.D.

Gentlemen who intend to bring forward cases or communications are requested to send notice to the Honorary Secretary as early as possible.

A. T. H. WATERS, M.R.C.P., *Honorary Secretary.*

Liverpool, May 22nd, 1860.

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 8TH, 1860.

F. C. SKEY, Esq., F.R.S., President, in the Chair.

ON THE CONDITION OF THE BLOOD IN MANIA.

BY W. CHARLES HOOD, M.D., L.R.C.P.

DURING the last few years, the attention of many scientific investigators has been directed to the condition of the blood in disease, and the discovery of some valuable facts has been the result. These have accumulated, and amongst them are instances which furnish support to the belief that there is some equivalent change in the blood in all diseases; and that the blood in *acute mania* forms no exception to the general rule, may be gathered from the writings of Drs. Hittorf and Erlenmeyer. Much remains to be done before we can have any exact knowledge of the state of the blood in insanity, and the author, with the able assistance of his friend Dr. Marcet, has been induced to make careful analyses of the blood of six maniacal patients, during the paroxysm and in a state of convalescence, which induce him to think that the facts arrived at (not before indicated) show, that *there is a marked deficiency of fibrine during the period of maniacal excitement, and a correction of this deficiency during convalescence.* The blood was drawn by cupping at the nape of the neck to the same amount in each case, and immediately collected in earthenware pots containing about two ounces each; and it was in every instance within a few hours of extraction subjected to the same method of analysis. The six cases selected were three of "acute" and three of "recurrent mania".

CASE I. *Acute Mania.* W. G., aged twenty-one, admitted into Bethlehem Hospital in December 1856, became maniacal one month before admission. Hereditary tendency was traceable in both his father and paternal grandfather. There was no apparent bodily disease. The patient was of spare habit and an excitable temperament, and had not been subject to any medical treatment previous to his admission. Nourishing diet was prescribed, and the following sedative mixture:—acetate of morphia, half a grain; tincture of hyoscyamus, one drachm; camphor mixture, eleven drachms—three times a day. At the end of a fortnight, the morphia was increased to one grain, three times a day. In September 1857, he was discharged cured.

Analysis of the Blood.

During maniacal excitement.		When discharged cured.	
Water	777·39	Water	784·93
Red particles	149·74	Red particles	110·07
Fibrine	1.74	*Fibrine*	2·20
Albumen, etc.	63·28	Albumen, etc.	90·63
Inorganic salts	7·85	Inorganic salts	8·00
Fatty matter.....	0·00	Fatty matter.....	4·17
	1000·00		1000·00

CASE II. *Acute Mania.* W. T. G., a drum-major in the Guards, admitted into Bethlehem Hospital in March 1857; was married, and had lived a temperate life. He was very excited, noisy, mischievous, and incessantly talking. Morphia

and sedatives, with full diet, were prescribed. In March 1858, he was discharged cured.

Analysis of the Blood.

During maniacal excitement.		When discharged cured.	
Water	791·64	Water	758·76
Red particles	125·48	Red particles	140·61
Fibrine	1·55	*Fibrine*	2·75
Albumen, etc.	69·84	Albumen, etc.	87·28
Inorganic salts	8·98	Inorganic salts	8·82
Fatty matter.....	2·51	Fatty matter.....	1·78
	1000·00		1000·00

CASE III. *Acute Mania.* E. R., married, and the mother of four children, was admitted into Bethlehem Hospital in June 1857, and discharged cured in May 1858.

Analysis of the Blood.

During maniacal excitement.		When discharged cured.	
Water	806·71	Water	800·90
Red particles	104·68	Red particles	109·32
Fibrine	1·67	*Fibrine*	1·75
Albumen, etc.	76·53	Albumen, etc.	74·99
Inorganic salts	7·41	Inorganic salts.....	8·89
Fatty matter.....	3·00	Fatty matter	4·15
	1000·00		1000·00

CASE I. *Recurrent Mania.* E. J. G., a single woman, was received into Bethlehem Hospital in 1837; since which date she has been subject to repeated attacks of recurrent mania, the paroxysms lasting five weeks, and being followed by two weeks' tranquillity and apparent mental restoration.

Analysis of the Blood.

During maniacal excitement.		During the convalescent stage.	
Water	769·66	Water	811·68
Red particles	121·77	Red particles	126·01
Fibrine	1·58	*Fibrine*	2·88
Albumen, etc.	98·44	Albumen, etc.	47·54
Inorganic salts	8·55	Inorganic salts.....	9·31
Fatty matter.....	0·00	Fatty matter.....	2·58
	1000·00		1000·00

CASE II. *Recurrent Mania.* F. B. was admitted into Bethlehem Hospital in the year 1838. The mental disease was clearly traceable to hereditary tendency. She suffers from alternations of mental excitement and tranquillity. The blood was taken in each of these states:—

Analysis of the Blood.

During the maniacal paroxysm.		During the convalescent period.	
Water	784·07	Water	765·73
Red particles	123·81	Red particles	139·05
Fibrine	0·06	*Fibrine*	2·46
Albumen, etc.	81·69	Albumen, etc.	81·75
Inorganic salts.....	8·62	Inorganic salts	8·09
Fatty matter.....	1·75	Fatty matter.....	2·92
	1000·00		1000·00

CASE III. *Recurrent Mania.* W. D. was admitted into Bethlehem Hospital in June 1841, at the age of 29, since which time he has been subject to continued attacks of recurrent mania: for a month or six weeks he will be found rational and conversable; but during the succeeding five weeks or more his entire mental condition appears to have undergone a revolution; irritability succeeds the natural amiability of his conduct, and he assumes the habits and bearing of a congenital idiot. The analysis of the blood was made at such periods as would best represent a fair specimen of each particular state:—

Analysis of the Blood.

During the maniacal paroxysm.		During the convalescent period.	
Water	773·86	Water	779·93
Red particles	135·56	Red particles	121·65
Fibrine	1·96	*Fibrine*	2·97
Albumen, etc.	79·22	Albumen, etc.	87·16
Inorganic salts.....	7·99	Inorganic salts.....	8·29
Fatty matter.....	1·41	Fatty matter.....	0·00
	1000·00		1000·00

On comparing these cases with those of an analogous character which have been put on record by Drs. Hittorf and Erlenmeyer, the lesson taught by them becomes more pointed and cogent.

M. Hittorf has recorded seven cases of acute mania in which he analysed the blood during the stage of maniacal excitement, and he concludes from them that there is in such cases a *diminution* in the amount of the globules, and an *increase* in the amount of water; the cases, however, show more than this, for they prove *a distinct diminution in the amount of fibrine of the blood.*

M. Erlenmeyer states that he has made 304 analyses of the blood, principally in cases associated with other internal diseases. He only details three cases; in two of them mania was accompanied by epilepsy. The conclusion drawn by Dr. Erlenmeyer from these cases, and from others not quoted, is, that augmentation in the number of red particles or in the amount of fibrine is a very unusual occurrence in insanity, and that the opposite state is the most frequent condition.

In all these cases, therefore, that have been instanced, there is a material deficiency in the amount of fibrine in the blood. Of Dr. Hittorf's seven cases, in six the amount of fibrine stands 1·3, 1·4, 1·8, 1·9, 1·9, 2·0. In Dr. Erlenmeyer's three cases, the amount of fibrine stands 1·7, 1·8, 2·3. While of our own six cases, the fibrine *in all* falls considerably below the normal standard, as follows:—1·9, 1·7, 1·6, 1·5, 0·06. Surely these results express something more than an accidental coincidence.

CASES OF CEREBRAL AFFECTION CAUSED BY DISEASES IN THE REGION OF THE NOSE AND EYE. BY HERMANN WEBER, M.D.

CASE I. A man, aged 25, was attacked by erysipelas of the right cheek, eye, and right half of the nose, on December 14th, 1850. Nine days later, when he was almost convalescent, he began to complain of a dull headache, which was followed by symptoms resembling those of acute hydrocephalus. On December 28th, he was somnolent, and there was incomplete left-sided hemiplegia. On December 31st, there was a marked improvement of all the symptoms; but already on the evening of the same day the patient became again comatose, and died on January 2nd.

Autopsy. The right cavernous sinus and ophthalmic vein were extended and filled with a greyish-red coagulum, which adhered firmly to the rather thickened walls. The exterior layer of this thrombus was more discoloured and crumbly than the centre, the latter being softer, and of cherry-red colour. There were, besides, sero-purulent effusion in the lateral ventricles, with softening of their walls, considerable swelling and redness of the choroid plexuses, and purulent meningitis on the lower surface of the anterior lobe of the right hemisphere.

CASE II. A man, aged 24, had contracted primary syphilis in 1845, and had afterwards suffered from secondary and tertiary symptoms. He was first seen by the author at the German Hospital in November 1851, when he was affected with syphilitic ozæna and necrosis of the vomer and other bones of the interior nose. By iodide of potassium and injections he was much improved; but discontinued the treatment before he was cured. On January 29th, 1852, a few days after the discharge from the nose had ceased, and the nose had been "stopped up" by dried crusts, the patient was suddenly seized with headache and rigors, which were at first of a strikingly intermittent character, returning every night; but after a few days the headache became constant. On February 7th, stupor, sluggishness of pupils, and pyæmic pleuritis, came on. On February 9th, there were, in addition, carphology, muscular twitching, ptosis of the left upper eyelid, and paralysis of the left rectus externus. On February 10th, there was incomplete hemiplegia of the right side. The patient died on the following day.

Autopsy. The left cavernous sinus and ophthalmic vein were filled with a greyish crumbly substance, firmly adherent to the walls, which were considerably thickened; the centre of the thrombus of the cavernous sinus was of pulpy consistence and greyish-red colour. The areolar tissue round the carotid artery and round the nerves on each side of the walls of the cavernous sinus was thickened. The lower surface of the left anterior lobe of the brain bore the signs of purulent meningitis, and the larger veins in connection with the cavernous sinus were distended, and their contents coagulated. The longitudinal, circular, right cavernous and left petrosal sinuses contained likewise coagula; which, however, were dark-red, and easily separable from the unaltered walls. The blood in the other sinuses was not coagulated; the ventricles contained only a moderate amount of fluid. Inspection of the interior of the nose was not permitted. There was no disease of bone in contact with the dura mater. Secondary abscesses were found

in the lungs and liver; and a sero-purulent discharge in the left pleural cavity.

The author remarked that these two cases, though different with regard to the original complaint, resembled each other in the manner of the propagation of the disease from the exo- to the endo-cranial regions—that is, the meninges and the brain. In either case, he was inclined to think that the introduction of morbid matter through the ophthalmic vein caused, in the first instance, coagulation of blood (thrombosis) in the corresponding cavernous sinus; that the meningeal inflammation of the adjacent inferior surface of the hemisphere was in both cases, and in the first case also the erysipelatous inflammation of the choroid plexuses, consequent on the thrombosis of the sinus. The author was further inclined to consider as well the thickening of the walls of the sinus and of the ophthalmic vein, as also the thrombosis of the latter, as consecutive to the thrombosis of the cavernous sinus and the changes occurring in the thrombus; the coagulum in the ophthalmic vein having the appearance of being of junior date to that in the sinus. He alluded, however, to the possibility of explaining the propagation of the disease by phlebitis.

Respecting the diagnosis of such cases, Dr. Weber pointed to our, as yet, limited acquaintance with the phenomena produced by thrombosis of the various sinuses of the dura mater. In the first case, there appeared to be no symptoms directly dependent on the condition of the sinus itself; but in the second, ptosis of the upper eyelid, and paralysis of the external rectus of the same side, were observed two days before death. These phenomena, easily explained by the relation of the third and sixth pair to the cavernous sinus, the author considered as of great diagnostic value. In cases of short duration, however, these phenomena would probably be absent, on account of the sheath of areolar tissue by which the nerves in their passage through the sinus are surrounded and protected. Attention was drawn also to the incomplete hemiplegia of the opposite side, and its changing character; but this symptom was not considered as due to the condition of the sinus itself, but to the consecutive affection of the brain adjacent to it.

Case iii. An infant was affected with chronic discharge from the left nostril and left eye from birth, contracted probably from the mother during parturition. At the age of ten weeks, while the child appeared otherwise in good health, the discharge ceased, the left nostril becoming closed by crusts; two days after this cessation, on May 8th, 1859, the child was seized with epileptiform convulsions, succeeded by coma. The epileptiform fits became, during the following days, more frequent, the convulsions being more marked in the right side of the body, until, on the morning of the 11th, the child sneezed repeatedly, and the discharge became reestablished. From this time the fits became steadily rarer and weaker, with the exception of two days, during which the discharge had again become very scanty. The principal part of the treatment consisted in the injection of warm water into the left nostril, and the frequent application of a warm moist sponge to the nose.

Case iv. A child, eighteen months old, was suffering from syphilitic coryza (ozæna), with much sanious discharge, more from the right than from the left nostril. On December 17th, 1859, two days after the discharge had suddenly ceased (under the influence of cold), and the nostrils had become blocked up by crusts, the child had an epileptiform fit, followed by a comatose condition and incomplete paralysis of the limbs of the left side. The fits returned several times on the same and following day. The coma was continuous; but after the removal of the crusts, the application of leeches to the nostrils, and copious injections of warm water, the discharge from the nose became reestablished, the fits became rarer, and did not occur any more after December 21st.

Dr. Weber observed, that although the nature of the original complaint had not been the same in these two cases, yet there was great similarity in the phenomena of both; that in both there had been chronic inflammation of a portion of the Schneiderian membrane, with considerable discharge; that in both, epileptiform fits and complete coma followed, within two days, the sudden cessation of the discharge; that one side of the nose being in both cases more affected than the other, the opposite side of the body had been in both more affected; that further, in both cases the symptoms of the endocranial affection, although very severe, disappeared almost immediately after the re-establishment of the discharge. The author remarked, that it appeared to him difficult to point out the exact nature of the endocranial affection. It might be supposed that in these cases, too, as in Cases i and ii, there had been absorption of morbid matter through branches of the ophthalmic vein; that this had led to stagnation of the blood in the corresponding cavernous sinus, and to further disturbance of the endocranial circulation, especially on the same side, which disturbance, in infants, more disposed to convulsive disorders than adults, had given rise to epileptiform fits; that the timely restoration of the normal passage for the discharge had prevented further absorption of morbid matter. The author felt, however, that other interpretations might be given. With regard to the immediate treatment, Dr. Weber attributed great value to the removal of the crusts, local depletion by leeches to the nostrils, and, above all, to the adequate use of the syringe.

MEDICAL SOCIETY OF LONDON.

Monday, May 28th, 1860.

A. B. Garrod, M.D., F.R.S., President, in the Chair.

CLINICAL DISCUSSION.

Radical Cure of Varicocele. Mr. H. Lee exhibited a patient illustrating the effects of the radical cure of varicocele. The patient had been in the Lock Hospital a week. The plan adopted had been that of acupressure by two needles, and division of the vein between them. [An account of Mr. Lee's method of operating will be found at p. 417.]

Action of Medicines. Mr. Hunt said he had long been inclined to the opinion that the doses of medicine might be regulated on the principle of giving them so long as they produce therapeutical effects, and withholding them so soon as they give rise to physiological—*i. e.*, injurious—effects. For instance, he did not believe that mercury does any good, but rather harm, when it begins to affect the mouth and gums. The same remark was probably applicable to arsenic, antimony, colchicum, iodine, iron,—in fact, to nearly every medicine of an active nature. The utility of medicines depended much on our knowledge as to when their use should be continued or discontinued.

The President, so far as his own experience was concerned, was disposed to concur with Mr. Hunt; and he believed that the general practice of the present day was tending in the same direction.

Mr. Canton said that a case occurred to him in illustration of the correctness of Mr. Hunt's observation. First, however, he would remark that Mr. Hunt had not taken sufficient notice of the constitutional peculiarities of patients, which influenced their susceptibility to the action of medicines. Some years ago, he (Mr. Canton) operated on a woman, aged about 40, for strangulated hernia. There was apparently nothing to prevent recovery. Opium was given for twenty-four hours; but peritonitis set in. Calomel and opium were then given; and the peritonitis diminished. The patient, however, unexpectedly presented a feverish state, with *malaise*. He explained this by supposing that the mercury had done all the good that it could, and was now producing physiological symptoms. The symptoms ceased on the mere withdrawal of the mercury. He would ask Mr. Hunt whether he did not think it necessary that the patient's health should always be supported when being placed under the influence of mercury. He had for years been always accustomed to give mercury in the form of hydrargyrum cum cretâ, with quinine at the same time.

Mr. Streeter agreed with the attention to the condition of the patient suggested by Mr. Hunt and Mr. Canton. But in some acute inflammations, in robust subjects, we must not be content with small doses. He would especially apply this remark to antimony and opium. These may in some instances be tolerated in large doses; and this he attributed to the difficulty of their entrance into the system in the conditions presented here. He agreed with what had been said as to the non-necessity of salivation in syphilis. The practice had been opposed, indeed, for many years.

Mr. Lee thought the distinction drawn by Mr. Hunt between the physiological and therapeutical action was very important; and that there was a way of separating these effects by a selection in the place of introduction of medicine. If mercury were introduced through the skin in syphilis, the physiological effects were avoided, and the therapeutical alone were produced.

The President thought that Mr. Hunt had intended that the doses should be proportioned to the individual habit.

Mr. Hunt agreed that it was important to attend to the state of the patient, and that it was often necessary to combine

quinine or iron with mercury. In cases of syphilitic rupia in ill fed patients, he had successfully given nitric acid by the mouth, and mercury by inunction. Antimony, also, was in many cases better borne if ammonia or some stimulant be given alternately with it. There was one exception to the doctrine he had proposed, in the action of emetics and cathartics. Here there must be a physiological effect; but the action was rather mechanical, consisting in the removal of injurious matter. He would add to his observations, that we should not so much seek to stop the medicine at its beginning to produce physiological effects, as rather to endeavour to enable the patient to bear more. He spoke of the iodide of ammonium, which he had tried at the suggestion of Dr. Richardson, and which he had found to be much better tolerated than the iodide of potassium.

The President asked Mr. Hunt regarding the arseniate of soda, as to its relation, in efficiency, to the arsenite of potash.

Mr. Hunt had not employed this salt. But he would observe, with regard to arsenic, that different preparations were often required by different patients. Of two similar cases of lepra under Mr. Hunt's care, one had improved under the use of chloride of arsenic, the other under that of Fowler's solution. Both then became stationary; but, on exchanging the forms of arsenic in the two cases, both recovered.

The President observed, that this agreed with an observation made to him by Dr. Neligan of Dublin, that it is sometimes requisite to change the form in which arsenic was being given, in the treatment of skin-diseases.

Dr. Richardson said, that the iodide of ammonium had been brought before the Society by him about four years ago. He had found it very rapid in its action on animals. He had then tried it on himself, and afterwards on patients. He must observe, however, that great care must be used in the procuring pure iodide of ammonium, as it was used in the arts, and an impure salt was liable to be obtained. He had compared the iodides of potassium, sodium, and ammonium; and had found the latter much the most active. He had seen a goitre removed in three weeks by this salt. He used it in enlarged tonsils in children, and in syphilitic cases; and he had lately used it in a suspicious case of tumour of the mouth. In this case, it was being applied locally; and the tumour, Dr. Richardson had been informed, was sensibly diminishing. The dose for internal use was from one to three grains.

Bellows for Artificial Respiration. Dr. Richardson exhibited a bellows for artificial respiration. He referred to an apparatus invented by Mr. Reid, and once exhibited to the Society by Dr. Snow; also to an instrument invented by Dr. Marcet. The instrument exhibited by Dr. Richardson consisted of a double pair of bellows, with a partition between them, and arranged so as to throw in and remove air at the same time.

Acupressure. Dr. Blobotski, a visitor, had heard Dr. Simpson explain his mode of applying acupressure. He had suggested to Dr. Simpson a method of applying pressure by springs; but he would now shew to the Society the newest form of the needle which Dr. Simpson used for acupressure, which he allowed to be a better method than the springs.

Mr. Lee did not wish to detract from the merits of Dr. Simpson as regarded acupressure, but he had employed a method of pressure on vessels by needles for seven years.

Dr. Routh said, that Mr. Wells treated varices by the application of a clamp. Every now and then, cases were met with, in connexion with pregnancy, of varicose veins. Would Mr. Lee operate in these? He (Dr. Routh) would think the external disease was only a manifestation of an internal condition.

Mr. Lee had seen cases of varicose veins in pregnant women, and had always ordered them to be left, unless there were imminent danger of their breaking or bleeding.

Mr. Price thought a great mistake had arisen as to the method of Dr. Simpson, who used merely a needle placed under the artery, without any figure of eight ligature or other application over it. He had heard of eight cases of amputation of the thigh in which acupressure had been tried; and he believed that, in most, the result had been as effectual as that of ligature. He had seen several amputation cases in which it had been successfully employed.

This was the last meeting of the session.

HARVEIAN SOCIETY OF LONDON.

May 17th, 1860.

J. C. Langmore, M.B., Vice-President, in the Chair.

ON THE COMMUNICABILITY OF SECONDARY SYPHILIS.

BY WEEDON COOKE.

Mr. Weedon Cooke said that it was singular how many questions respecting syphilis remained unsettled, considering the numbers who suffered from the disease, and the length of time it had been known and studied. Even the primary symptoms still give rise to controversy. Some declare the hard chancre only infectious; others say that the soft chancre does not infect the constitution, but may produce a hard chancre which does infect; whilst others denominate the soft chancre a chancroid ulcer, which is not syphilitic at all. A fourth party considers both these chancres syphilitic, and therefore capable of producing constitutional symptoms. As a consequence of these differences of opinion, there is much diversity of treatment, which is a practical evil. Respecting the communicability of secondary symptoms, there is much yet to be cleared up. It is a recognised fact that secondary syphilis is conveyed through the father to the fœtus *in utero*, and from the fœtus to the mother. Mr. Cooke had verified this fact in numerous instances. He related the case of a lady who had two syphilitic children without herself being affected; but, upon the birth of a third, she exhibited all the signs of a severe constitutional attack. Although this mode of communication had been long recognised, it has until recently been denied that secondary symptoms ever were communicated from one person to another. It is well known, however, that M. Ricord, the staunch supporter of non-communicability, has been obliged to modify his opinions, owing to the production of incontestible evidence that the discharge from secondary ulcers did produce eruptions and ulcers of a similar character; whilst the French authorities, convinced of the possibility of this infection, not long since prosecuted two medical men for inoculating two children suffering from favus with the matter of secondary syphilitic disease. Mr. Henry Lee also has recently brought before the profession instances which favour the conclusion that the constitutional disease can be conveyed from one person to another. Mr. Cooke then related the particulars of a boy, who had been recently under his care at the Royal Free Hospital, exhibiting indubitable evidence of this occurrence. A fine boy, 7 years of age, was covered with an eruption which could not be mistaken for anything but psoriasis syphilitica. He had also enlargement of the occipital glands; the throat was much injected; and recently, from being a very healthy boy, he had become cachectic. He was ordered two grains of grey powder twice a day, and got quite well in less than three weeks. His mother, who brought him, was herself affected with the same eruption; she had also ulcers on the inside of her lips and cheeks, and had suffered much from rheumatism. Her husband had given her primary syphilis one year before. After being "cured" of this, secondary symptoms appeared, and she was treated and got well. She remained well until about six weeks ago, and had since that time been affected as stated. The boy slept with her, and she was, of course, in the habit of kissing him. A month after the reappearance of the disease in the mother, the son became affected. This case Mr. Cooke considered conclusive of the possibility of communicating secondary syphilis. It was no doubt a very rare occurrence, because the discharge from a secondary ulcer would very rarely be applied to a raw surface capable of absorbing it; but, when so applied, it evidently had the power of infecting a previously healthy person, and it was most desirable that this fact should be known and recognised.

The Queen's College, Birmingham. An adjourned meeting of the Council was held on Monday last; the Right Hon. the Earl of Lichfield in the chair. A sub-committee was appointed, consisting of the Earl of Lichfield, the Hon. and Rev. Grantham Yorke, the Rev. James Thomas Law, Chancellor of the diocese of Lichfield, Mr. Sands Cox, Mr. J. B. Payn, Mr. J. Clift, "to consider and report upon a plan for the future carrying on the College in all its departments." A scheme is now under consideration by which the College will be placed on a sure and permanent basis. Mr. Chancellor Law retains his office of Warden *pro tem.*, and the entire income from the endowments derived from the coupons of the Great Western Railway, about £500 per annum, is to be devoted towards the expenses of the College. (*The Standard.*)

Editor's Letter Box.

SUDDEN DEATH WITHOUT POST MORTEM APPEARANCES.

LETTER FROM J. Z. LAURENCE, ESQ.

SIR,—In answer to Dr. T. O. Ward's note on my case of "Sudden Death", I beg to say that (as already detailed in my paper) "the larynx, trachea, and œsophagus were healthy, *and contained no traces of any food in them*"; that, further, Dr. Randall, who assisted me in the *post mortem* examination, introduced his finger from the lower part of the pharynx to the root of the tongue, without meeting with any obstruction. On account of the enormous rigidity of the clenched lower jaw, it was found impossible to open the mouth sufficiently wide to *see* the fauces. I may add that, aware of the possibility of the girl's having died from choking, Drs. Randall, Rowdon, and myself, specially directed our attention to this circumstance, and convinced ourselves that such was *not* the case.

I am, etc., J. ZACHARIAH LAURENCE.

30, Devonshire Street, Portland Place, May 26th, 1860.

THE WORKING OF THE MEDICAL ACT.

LETTER FROM A. B. STEELE, ESQ.

SIR,—Your leader of Saturday, certainly bears out your position, that the 40th section of the Medical Act has not proved a dead letter; but I question if this is so much a matter for congratulation as you seem to infer.

It is perfectly true that illegal practitioners may and have been convicted under that clause; but these results have depended far more upon the light in which justices of the peace have happened to view quackery and the rights of the profession than upon the clearness and stringency of the Act. Indeed, in a case which was referred to a higher court, one of the judges declared that "the magistrates might have decided either way—*i.e.*, either for or against the pretender—so conveniently vague and indefinite is the wording of this section. Infinitely better would it have been to have made the clause so decidedly and unmistakably a dead letter, that no one could have been allured by its apparent meaning and intention into the doubtful and dangerous paths of legislation.

A case now pending, and in which the decision of the Court of Queen's Bench will shortly be given, may perhaps throw further light upon the correct interpretation of the clause in question; in the mean time, the success or failure of a prosecution very much depends upon the widely differing opinions of the magistrates, lay or stipendiary, as the case may be, and upon the tact, spirit, and purse-strings, of the offender. It is doubtful whether any of the cases you cite would bear the test of an appeal to a higher court.

I am one of those who regard the passing of the Medical Act as an important epoch in the history of the profession, and on that account desire that its imperfections should be, with a view to their removal, clearly pointed out.

A critical review of the various clauses of the Act must satisfy those who have paid much attention to the subject, that they afford an example of crude legislation; and that in many instances the wording is extremely vague and illdefined; and that, in short, an amended Act is imperatively called for.

As this subject will probably, as you suggest, be fully discussed at the ensuing Branch meetings, I abstain from entering into details. I merely wish to keep in view the necessity which exists for an improvement in the Act, and in furtherance of that object to neutralise (what, you must pardon my saying, appears to me) a somewhat too flattering representation of the present position of medical legislation.

The second clause, quoted in your article as emanating from the Northamptonshire Association, if enacted, would render registration compulsory upon all persons in actual practice, and thus decide a point upon which some difference of opinion now exists; this would, in my opinion, be a great advantage; the suggestion is therefore valuable beyond any effect which it might have upon the practices of prescribing druggists.

I am, etc., A. B. STEELE.

Liverpool, May 26th, 1860.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Of sons, the wives of—

CHARTRES, J. S., M.A., M.D., Staff Assistant-Surgeon, at Seacombe, on May 23.

*ELLIS, Henry W. T., L.R.C.P.Ed., at Crowle, on May 28.

EVANS, U. W., M.D., 2nd Battalion 15th Regiment, at Malta, on May 16.

HOOKER, Joseph D., M.D., F.R.S., at Kew, on May 27.

STOKES, Henry J., M.D., at Canonbury Square, on May 24.

Of daughters, the wives of—

*BROWN, John, Esq., Whitchurch, Salop, on May 18.

WEBB, Edward L., M.D., St. George's Road, on May 20.

MARRIAGES.

SANDWITH, Humphry, Esq., C.B., D.C.L., Colonial Secretary of Mauritius, to Lucy Ann, youngest daughter of the late Robert HARGREAVES, Esq., Accrington, at Paddington, on May 29.

TAYLOR, Alfred A., Esq., Surgeon, Queen Street, Cheapside, to Elizabeth Ann, third daughter of William SHELBOURNE, Esq., Highbury Crescent, at Highbury, on May 22.

WILLIAMS, Joseph, Esq., Surgeon, New Brentford, to Honor, youngest daughter of the late G. W. NEWTON, Esq., Hampton Court, at Ealing, on May 26.

DEATHS.

COBBOLD. On May 22, at 39, Norland Square, aged 2 months, Edith C., fifth daughter of T. S. Cobbold, M.D., F.L.S.

COOPER. On May 23rd, at Croydon, aged 6 months, James, youngest son of G. Cooper, Esq., Surgeon.

HOBSON. On May 24th, at Kelvedon Hatch, Essex, aged 17, Edward G., second son of the late E. C., Hobson, M.D., of Melbourne, Australia.

SMITH. Albert, Esq., at Northend Lodge, Fulham, aged 43, on May 23.

APPOINTMENTS.

BADER, Charles, Esq., appointed Second Assistant in the Hunterian Museum of the Royal College of Surgeons.

INGRAM, Charles P., B.A., M.B., elected Physician to the Royal General Dispensary, Aldersgate.

PASS LISTS.

ROYAL COLLEGE OF SURGEONS. MEMBERS admitted at a meeting of the Court of Examiners, on *May 30th*:—

BAINES, Charles W., Bradford-on-Avon
BECHER, Emil W. R., Army
DUNN, Christopher B. N., Auckland, New Zealand
HUXLEY, James U., Hart Street
JONES, Thomas E., Trefriw
LONG, Alexander, Liverpool
MACKERTICH, S. N., Calcutta
MOORE, Robert W., Clifton-on-Teme, Worcester
NORRIS, Richard, Birmingham
PEDGRIFT, Harry, Laxfield
ROBERTS, William, Lingards, Yorkshire
TEMPLE, T. B., Edinburgh
THOMPSON, S., Knottingley
TUCKER, Anthony C., Sheepwash, Devon
WALKER, George C., Kirkdale, Liverpool
WALLIS, A. W., Orsett, Essex
WALLIS, William, Hindley
WATKINS, Walter, Brecon

APOTHECARIES' HALL. LICENTIATES admitted on *Thursday, May 24th*, 1860:—

BLUNDELL, Wm., Sherborne
JONES, Thomas, Rhyl
FEWKES, Joseph, Barrow
RICHARDSON, Wm. H., Clifton, York
WELCH, Francis H., Stansted

The following gentlemen also, on the same day, passed their first examination:—

HUTCHINSON, John Hanley, University College
KEEL, Charles F., St. Thomas's Hospital
MOORE, Daniel, St. Thomas's Hospital
STRUTT, George H., Tutbury
THOMASON, Wm. J., St. Bartholomew's Hospital

ALLEGED INJURIOUS ATTACK ON THE CHARACTER OF AN INDIAN MEDICAL OFFICER.

IN the JOURNAL for May 5th, at p. 343, we noticed briefly some proceedings that had arisen out of sundry apparently grave charges made by Dr. Macpherson, inspector of hospitals in the Madras Presidency, against Dr. Beetson, the superintending surgeon of Trichinopoly. We now intend to lay the details of the case more fully before our readers; deriving our information from the periodicals (*The Indian Lancet* and *Indian Statesman*) to which reference was made in our previous notice.

In January 1858, it is stated, Dr. Macpherson came to Trichinopoly, and met Dr. Beetson apparently in a friendly manner. Dr. Beetson had, according to authentic accounts, done able and efficient service in his profession for upwards of thirty-four years. Dr. Macpherson is represented as being a much younger man, and as owing his new appointment to his having been employed in the Crimea.

It would appear, however, that Dr. Macpherson had been sent to Trichinopoly to make inquiry and report upon the capacity, private and professional, of Dr. Beetson. With a view to obtain evidence, he called on the principal civil and military officials at Trichinopoly; and from statements of a most general description, he wrote a demi-official letter to the Director-General of the Medical Department (Dr. Magrath), putting the facts, or supposed facts, into the most damaging shape for the reputation of Dr. Beetson. Here is an extract from the letter.

"Dr. Beetson is the butt of Trichinopoly. He is held in no respect. He is quite the laughing-stock of every one in the place, from the judge to the lowest subordinate. He lives or did until very lately, I am told, in open concubinage with two sisters, who sometimes make their appearance at the band and public places; of late he has been giving large dinner parties and balls, and instead of, as formerly, being quite a recluse, he now goes out everywhere. He has thrown his house open to all the young fellows, and sits up drinking with them till dawn of day. He has taken to singing a nonsensical song, which he repeats over and over again, sometimes a dozen times in one night. The young lads pat him on the back, and make quite a fool of him; and to such an extent has his nonsensical conduct gone, that the general was obliged lately to take him to task. Thus, as you may believe, the tone of our department, which an officer in his position should do his utmost to elevate, is at this station lowered, and a pernicious example is set by him to all under him. The mode in which he conducts his public duties is puerile in the extreme; he neither looks into, nor does he trouble himself with professional qualifications. The state of the mortars and pestles —the broken spatulas—the old cumblies, the measuring and weighing out the drugs in the dispensary, etc., forms the extent of his inquiries at his inspections; and in carrying out these, he in the most childish way occupies the time of the medical man in a very foolish and unnecessary manner. From all I hear, I suspect the old man is quite in his dotage. It makes me quite angry to listen to remarks made of him in public society. He has of late become so fascinated with his song, that he has had it set to music, gets the cavalry band to play it, and presents copies to the ladies of the station. As I have already told you, he gives large dinners repeatedly; and on these occasions, the European women of the garrison are at the back door to take away with them what they can. I could occupy sheets with the absurd proceedings of this man—which have become a public scandal to our profession. He does not appear to have one redeeming point. You know better than I do the style in which he conducts his official correspondence with head quarters; and I have seen sufficient here to mark his utter incapacity in his communications with others: altogether he is a disgrace to us, and he tends to bring our profession to low repute. If you think proper, you are at liberty to make this communication a demi-official one, and act on it accordingly. I shall be rejoiced to learn that any proceedings which you may be pleased to adopt on this communication, may be the means of sparing me the pain of placing before you, in an official form, the discreditable conduct of this old officer."

In a subsequent report, dated April 17, Dr. Macpherson writes:—

"I cannot conclude this report without adverting to one point more, it is one of peculiar delicacy. But I feel that I should fail in my duty if I passed it in silence. Government, as a general rule, does not concern itself much with the private morality of its officers and servants, so long as the public service does not suffer. But I humbly conceive that the time has arrived when it is no longer to be tolerated that an officer at the head of a department at the Head Quarters of a Division of the Army should live in open concubinage in the centre of Cantonment, in the midst of officers' families; and this Mr. Beetson, until recently, has done to the discredit of his position and his profession. None, so far as I can learn, respect him, and I am sure the Director-General will sympathise with those of our profession who bitterly expressed to me the feeling of humiliation they experience when brought into official contact with him, and observe him made the butt of thoughtless young officers with whom he sits up at night, singing convivial songs."

On the reception of Dr. Macpherson's first letter, Dr. Magrath at once wrote to the Adjutant-General of the Army, "earnestly urging the propriety of removing this officer (Dr. Beetson) from the post he unworthily occupied." It seems scarcely credible that a letter founded on entirely *ex parte* third hand statements, should ever have been listened to. Nevertheless, Dr. Macpherson's assertions were not only at once received, but Dr. Beetson was suddenly and unexpectedly called on to tender his resignation. He was simply told that his proceedings, both in private and professional life, were such as would compel the commander-in-chief to get him removed from his appointment, unless he at once voluntarily resigned. He replied by asking for an opportunity of returning the charges against him, and in return was supplied with copies of letters by Drs. Magrath and Macpherson; and of a letter by General Budd, who, though he appears to have been the principal authority from whom the charges against Dr. Beetson's private character were drawn, did but in an extremely small degree confirm in his epistle the assertions of Dr. Macpherson. Dr. Beetson was further arbitrarily required to resign not only his appointment, but the service, on pain of the commander-in-chief dealing publicly with the case. But Dr. Beetson demanded a full and particular investigation of his character, public and private. This request was conceded; and a Court of Inquiry assembled at Trichinopoly on the 22nd April, 1858.

The charges against Dr. Beetson resolve themselves into those of immoral and unbecoming conduct, and of professional incapacity. The first of these charges was the one prominently brought forward; with what success the following extracts from the evidence will show.

Mr. W. C. Sim, Head Assistant Collector of the District, gave evidence from which the following is an extract:—

"In what estimation do you think Dr. Beetson is generally held by the private society in this station? I cannot answer for the society in general; but, as far as I am concerned, *I consider him a gentleman in every respect*, and I have met him four or five times in society, and have never seen him guilty of an impropriety.

"Have you at any places of public resort met any women, supposed to be, or pointed out to you as being, in the keeping of Dr. Beetson? No, neither in public nor in his own private house.

"Have you any knowledge or reason to suspect that Dr. Beetson is now, or was till very lately, living in open concubinage, and if so with whom? I have no personal knowledge of the fact, nor am I justified in suspecting it.

"Do you know of Dr. Beetson having given dinner parties and balls? Yes, and I have been at one dinner party and two balls given by Dr. Beetson.

"Has Dr. Beetson thrown his house open to all the fellows in this station, and does he sit up drinking with them till dawn? I fancy no young fellow will go to Dr. Beetson's house without a special invitation; at least I would not do so. I conclude he carries out the privilege of a host, but I must say that I have never seen him exceed in the slightest way.

"Have you heard Dr. Beetson sing a nonsensical song, and repeat it during the same night? I have heard Dr. Beetson sing a song which I have heard sung in England, and which he has repeated at the solicitation of his friends. It was a comic song, but there was nothing unseemly or objectionable in it.

"Have you, at any of the parties when you met him seen any of the young men pat him on the shoulder, or treat him with any undue familiarity, considering his position in society? I have never seen any officer pat Dr. Beetson on the back; I consider that there has been some slight familiarity between Dr. Beetson and young officers, but never carried to undue lengths."

Captain G. W. Russell, Paymaster, "did not consider, from his own experience, that Dr. Beetson was the butt of Trichinopoly. For his own part, he had always esteemed him highly; and, as far as he could judge from the way in which he was treated by others, he was looked on by them in the same light. He certainly did not believe there was any truth in the report that Dr. Beetson lived, or had been living until lately, in open concubinage. He (witness) had been in the habit, until very lately, of attending bands of an evening; and never saw or heard of there being any woman or women said to be in the keeping of Dr. Beetson. Until within about the previous year, Dr. Beetson (he believed) kept entirely to himself, except occasionally, when witness might have met him at messes and elsewhere. Since then, he had given a few dinner parties, and entered into society generally. Since Dr. Beetson had gone into society, witness had certainly not observed any particular change in his manner or temper that would lead to the supposition that he was childish or in his dotage. If Dr. Beetson kept open house, and was 'hail fellow well met' with all the young men in the place, witness would certainly have heard of it. He had never seen him treated with disrespect or over familiarity by any one. Prior to the assembly of the Court of Inquiry, he was not aware that there were any rumours to the prejudice of Dr. Beetson. There was a vague report some years ago, which the witness had every reason to believe was false. He had heard Dr. Beetson sing a comic song, which he repeated once or twice on being pressed, but not more to the witness's knowledge. Witness did not consider that any ridicule attached to him in doing so. He did not think that Dr. Beetson's conduct had been such as to lower him in the opinion of society, or that he had been setting a pernicious example to the young men in the place. On the occasion of Dr. Beetson giving entertainments, amongst the younger guests, witness never observed any improper conduct or improper style of conversation. He never heard of the European women being in the habit of attending at Dr. Beetson's whenever he gave a party, although he had been invited to every party."

Captain Ritherden "did not think Dr. Beetson's manner and conduct such as to bring contempt upon his profession and station; nor did he consider his example pernicious to the junior members of society. From what he knew of Dr. Beetson, he would not consider him imbecile or in his dotage—rather the contrary. He had seen him show a great deal of mental activity; particularly some eight days after his (witness's) arrival, when he was a stranger to Dr. Beetson, when the latter was superintending the preparations for a ball, when witness was surprised at his activity for so old a man. If the European women attended his parties to see what they could get, witness would have known it, as the company generally retired after dinner into the garden at the back of the house to talk."

Similar evidence was given by Lieutenant Colonel Cherry, Lieutenants and Adjutants Wyse, Dyneley, and Worksop. The following evidence is that of a witness specially called by Dr. Macpherson:—

"Up to what hour, at the latest, have you sat up with Dr. Beetson? Till 12 o'clock on one occasion, with other people.

"Have you heard him sing one or more songs on the same evening? One song.

"How many times have you heard him sing this song in the same evening? About half a dozen times, at the particular request of the people who were present.

"Was he importuned by the company generally to sing this song? Yes.

"Did he require much importunity? Not very much.

"What cognomen is Dr. Beetson known by, and generally spoken of, in connection with this song? I have head him talked of, behind his back, by young men, as Tooraloo.

"Have you heard that the European women of the garrison receive *débris* of his feasts? I have heard on one occasion, when Dr. Beetson gave a ball at the Public Rooms, that the butler of some regiment permitted the women of the garrison to help themselves to the liquor that remained, against Dr. Beetson's consent, and much to his astonishment.

"Can you yourself vouch for the truth of this report? No, I was not in the cantonment.

"Have you on any occasion seen any of the young men in the cantonment pat Dr. Beetson on the back, or take any liberties with him? I have never seen any young man take any liberty with Dr. Beetson.

"From the way in which Dr. Beetson behaves and is treated in society, do you consider that he is looked on as a butt or object of ridicule? That is a matter of opinion, not evidence."

The next witness was Brigadier Wahab, one of the gentlemen on whom Dr. Macpherson had called when he was busied in getting up the case; but his testimony was favourable to Dr. Beetson. Only one witness, indeed, appeared to substantiate the charge that Dr. Beetson was made a butt of; and this was a certain Captain Nicholas, a gentleman who "never attended balls". From a passage in the evidence of the Deputy Judge Advocate General, it appears that, if indeed it were a crime on the part of Dr. Beetson to sing "Tooraloo", a very respectable lady and gentleman might have been charged as accessories before the fact. The following is the passage:—

"Colonel McCally intended to give two evening parties specially to introduce Dr. Beetson without restraint to the whole of the families in the station. I was at both these parties. On the first occasion, I heard that Dr. Beetson had been persuaded by the hostess to sing a song in character: during the evening, I know he was pressed to do so by her, and also Colonel McCally. He went out of the room, and returned dressed as a woman. I myself, at the time, thought it a bad joke to play on a man of his years; but, as the people who chiefly persuaded him were his old friends, and at the same time holding the highest position in the station, I considered it no business of mine to make any remark; and considering this was the first time Dr. Beetson had entered into ladies' society for many years, I made allowances for him which I could not have done for any other person of his years. This was not voluntary on his part, he simply yielded to the pressing request of the host, hostess, and others."

Dr. Macpherson founded his charges against Dr. Beetson in part on a letter of Major-General Budd—who was not called as a witness. The *Madras Daily Times*, which takes up the cudgels for Dr. Macpherson, inserts this letter in an article which is copied into the *Indian Lancet* for April 1. The *Madras Daily Times* regards the letter as "sufficiently establishing the charges alleged by the Inspector-General":—

"Trichinopoly, 11th February, 1858.

"MY DEAR MAGRATH,—I have just received your demi-official of the day before yesterday about Dr. Beetson. I cannot speak to all Dr. Macpherson has written to you; he has made it his business to inquire, and I have both seen and heard enough to enable me to say that I observed with sincere regret that he really did not uphold the respect due to his position. I heard of his croaking a snatch of a song ten times over at a mess party, and sitting up till five o'clock in the morning, not that he drinks or cares for liquor at all: on the contrary, I believe he is an abstemious man. I have heard of other foolish things, quite unbecoming to a man of his years. He is a kind well meaning man, and, upon mature reflection, I deemed it my duty, though a very distasteful one, to give him a hint to drop his singing, and keep rational hours. I told him plainly that the youngsters were laughing at him, and he promised to give up his singing. He conducts all details satisfactorily, and appears to be wide awake in circulars and medical regulations. I know nothing of his amours. I had heard that he had broken up his establishment, whatever that might have consisted of. I doubt about the woman going to the band, but however that may be, I will venture to say it is not with his knowledge; of course, if the Brigadier or myself were cognisant of any such outrage, it would be at once noticed. If Dr. Beetson has any friends, I think they would do him a great kindness in advising him to withdraw from public life.—Believe me yours very sincerely, (Signed) R. BUDD.

"N.B. I gave the substance of the above in my Annual Confidential Report."

The result of the inquiry was to "exonerate Dr. Beetson from imputations against his moral character." His offence was reduced therefore by one half; but his punishment (his removal from his appointment, involving a pecuniary loss of 21,000 rupees) remained the same. His professional conduct was not made the subject of inquiry; but we find some evidence on this subject in the documents before us. Dr. Macpherson himself, writing from Trichinopoly, says that "most of the hospitals here are all that the best of us can desire to find—but that is due to the care and zeal of the executive officers in charge." General Budd, as has been already seen, says that "Dr. Beetson conducted all details satisfactorily, and appeared to be wide awake in circulars and medical regulations." Dr. Davids said that Dr. Beetson did not appear to have his mind impaired, and that he did not overlook essentials and take up the witness's time with trifles in an unnecessary manner. In his (Dr. Davids's) opinion, Dr. Beetson was very strict. Dr. Marrett, Zillah Surgeon of Salem, another of Dr. Beetson's subordinates, wrote as follows:—

"MY DEAR BEETSON,—I was very sorry indeed to see in the Gazette that you were removed from your appointment. It came like a thunderclap on me. It is not for me to inquire why you have been so dealt with, but all I can say is *we shall never have a better Superintending Surgeon*, nor one who gave more satisfaction to all the Medical Officers in the Division: however, I trust this cloud may soon blow over, and the horizon be bright and clear again."

Here is a communication from Dr. Clementson, Zillah Surgeon, Tinnevelly:—

"MY DEAR DOCTOR,—With reference to your letter of the 15th ultimo, I beg to state, as far as one holding lately a subordinate position may be permitted to do so, that officially you have always been careful to see that both I and my subordinates conducted our duties efficiently, and according to the rules of the service; and, in the matter of periodical returns, any incorrections were immediately brought to our notice."

The *Madras Daily Times*, in an article quoted in the *Indian Lancet* for April 1st, takes the side of Dr. Macpherson; and informs us that "Mr. Beetson was removed from his appointment and allowed to remain out of employment, until he had served for the highest rate of pension, when he finally retired from the public service."

THE AFFINITIES OF VACCINE MATTER. The old question as to the identity of grease in horses with vaccine has lately been revived at Toulouse. Dr. Fontan, in a letter to the *Union Médicale* of last Tuesday, states that there has lately been in that city an epizootic of grease, characterised by the presence of pustules. At the veterinary school there, the udders of cows have been inoculated with the matter from these pustules, with the result of obtaining fine pustules of cow-pock. From these cows, thirty children have been vaccinated; in all the operation has succeeded, so far as regards the production of characteristic pustules, and in none have there been any constitutional symptoms. A public commission has been appointed to follow out these experiments.

PROSECUTION FOR ILLEGAL PRACTICE IN FRANCE. On February 9th Mlle. M. Bressac was condemned, for illegal practice, by the Tribunal of Correctional Police at Lyons, to pay two fines of 15 *francs* each, together with 1000 *francs* to the medical men who had brought the action, and to be imprisoned two days. Against this decision she appealed to the Imperial Court at Lyons; founding the appeal principally on the fact that her prescriptions had been fortified by the signature of a medical man. The Court, however, confirmed both the decisions of the tribunal.

EPIDEMIOLOGICAL SOCIETY. On Monday, June 4th, a paper will be read, entitled "Suggestions towards a better method of observing Epidemics." By J. N. Radcliffe, Esq.

HEALTH OF LONDON—MAY 26TH, 1860.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week	Boys.. 842 / Girls.. 838	1680	.. 1087
Average of corresponding weeks 1849-58		1606	.. 1133

Among the causes of death were—bronchitis, 81; pneumonia, 48; phthisis, 171; small-pox, 24; scarlatina, 26; measles, 51; diphtheria, 8; hooping-cough, 33. The deaths from pulmonary diseases (exclusive of phthisis) were 157, being 1·6 below the corrected average.

Barometer:
Highest (Mon.) 30·208; lowest (Sat.) 29·268; mean 29·850.

Thermometer:
In sun—highest (Wed.) 130·8 degrees; lowest (Fri.) 105·7 degrees.
In shade—highest (Wed.) 76·5 degrees; lowest (Mon.) 45·3 degrees.
Mean—59·0 degrees; difference from mean of 43 yrs. + 4·8 degrees.
Range—during week, 31·2 degrees; mean daily, 24·7 degrees.
Mean humidity of air (*saturation* = 100), 67.
Mean direction of wind, S.W.—Rain in inches, 0·20.

TO CORRESPONDENTS.

ANONYMOUS CORRESPONDENTS should always enclose their names to the Editor; not for publication, but in token of good faith. No attention can be paid to communications not thus authenticated.

Members should remember that corrections for the current week's JOURNAL should not arrive later than Wednesday.

Communications have been received from:—DR. LIONEL BEALE; MR. J. V. SOLOMON; DR. GUY; MR. J. Z. LAURENCE; DR. STEWART; DR. BARNES; MR. D. KENT JONES; DR. C. M. BURNETT; MR. A. B. STEELE; MR. RD. HUGHES; MR. T. L. PRIDHAM; DR. BURRIDGE; MR. JAS. ROUSE; DR. F. J. HENSLEY; DR. W. H. HOLMAN; DR. P. H. WILLIAMS; MR. J. A. LOCKING; DR. H. W. T. ELLIS; MR. W. L. WRATISLAW; MR. JONATHAN HUTCHINSON; MR. W. S. COX; MR. JOSEPH WHITE; MR. T. M. STONE; and DR. A. T. H. WATERS.

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The New Sydenham Society.—

THE first work (Vol. VI) for the current year is expected to be ready for issue in the last week of June, and will be followed very shortly by two others. Those of the Hon. Local Secretaries and Members who have not yet forwarded their Subscriptions, will oblige by doing so as early as convenient, as the Council has decided that in future the Society's Law requiring pre-payment shall be strictly acted upon. The Society now numbers 2,750, and there is every probability that the number required (3,000) for the issue of the Atlas of Skin Diseases will shortly be obtained.

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